

California High-Speed Rail Authority



RFP No.: HSR 13-57

**Request for Proposals for Design-Build
Services for Construction Package 2-3**

**Reference Material, Part B.3
PE4P Non-Standard and Complex Structure Plans**

**The information contained in these plans supersede the design of the respective structural elements in the document
titled "P13-57 - RM.B.01 - Preliminary Design Plans.pdf"**

CALIFORNIA HIGH-SPEED TRAIN

Engineering Drawings

Preliminary Engineering
for Procurement
Record Set Submission
Fresno to Bakersfield
Sierra Subdivision
Construction Package 2-3
Non-Standard and Complex
Structure Plans

June 2014



HST STRUCTURES

DRAWING No	DRAWING DESCRIPTION	SHEET No
GE-A0030	STRUCTURES - INDEX OF SHEET (SHEET 1 OF 1)	
ST-J1023	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - PLAN AND ELEVATION	
ST-J1024	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - PLAN AND ELEVATION	
ST-J1028	HANFORD SUBSECTION - ALIGNMENT H - CONEJO VIADUCT - TYPICAL SECTIONS	
ST-J1037	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	
ST-J1044	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	
ST-J1045	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - PLAN AND ELEVATION	
ST-J1048	HANFORD SUBSECTION - ALIGNMENT H - KINGS RIVER VIADUCT - TYPICAL SECTIONS	
ST-J1050	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - KEY MAP	
ST-J1051	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1052	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1053	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1054	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1055	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1056	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1057	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1058	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1059	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1060	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1061	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - PLAN AND ELEVATION	
ST-J1062	HANFORD SUBSECTION - ALIGNMENT H - HANFORD VIADUCT - TYPICAL SECTIONS	
ST-J1067	KAWeah SUBSECTION - ALIGNMENT K4 - STATE ROUTE 43 UNDERPASS - TYPICAL SECTIONS	
ST-J1080	KAWeah SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - PLAN AND ELEVATION	
ST-J1083	KAWeah SUBSECTION - ALIGNMENT K4 - CROSS CREEK VIADUCT - TYPICAL SECTIONS	
ST-J1094	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	
ST-J1095	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - PLAN AND ELEVATION	
ST-J2002	CORCORAN BYPASS SUBSECTION - ALIGNMENT C2 - STATE ROUTE 43 BNSF VIADUCT - TYPICAL SECTIONS	
ST-J5001	BOX CULVERT - TYPICAL DETAILS - SHEET 1	
ST-J5002	BOX CULVERT - TYPICAL DETAILS - SHEET 2	
ST-J5010	RETAINED EMBANKMENT - TYPICAL RETAINING WALL	
ST-J5022	PACKAGE 2-3 - 210'-0" STEEL TRUSS - SECTIONS AND LAYOUT - GENERAL ARRANGEMENT	
ST-J5023	PACKAGE 2-3 - 210'-0" STEEL TRUSS - DETAILS	
ST-J5024	PACKAGE 2-3 - 280'-0" STEEL TRUSS - SECTIONS AND LAYOUT - GENERAL ARRANGEMENT	
ST-J5025	PACKAGE 2-3 - 280'-0" STEEL TRUSS - DETAILS	
ST-J5032	PACKAGE 2-3 - 315'-0" STEEL TRUSS - SECTIONS AND LAYOUT - GENERAL ARRANGEMENT	
ST-J5033	PACKAGE 2-3 - 315'-0" STEEL TRUSS - DETAILS	
ST-J5034	PACKAGE 2-3 - 350'-0" STEEL TRUSS - SECTIONS AND LAYOUT - GENERAL ARRANGEMENT	
ST-J5035	PACKAGE 2-3 - 350'-0" STEEL TRUSS - DETAILS	
ST-J5051	PACKAGE 2-3 - ELEVATED SLAB STRUCTURE - SECTIONS AND LAYOUT - GENERAL ARRANGEMENT	
ST-J5054	PACKAGE 2-3 - ELEVATED SLAB STRUCTURE - TYPICAL SECTIONS AND LAYOUT - GENERAL ARRANGEMENT	
ST-J5058	PACKAGE 2-3 - ELEVATED SLAB STRUCTURE - TYPICAL SECTIONS AND LAYOUT - GENERAL ARRANGEMENT	

\$FILE\$

\$PLTDRV\$

\$PNTBLSS\$

\$TIME\$

\$USER\$

REV

DATE BY CHK APP

DESCRIPTION

DESIGNED BY
P. TONKIN
DRAWN BY
J. VALENZUELA
CHECKED BY
K. SEYMORE
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION



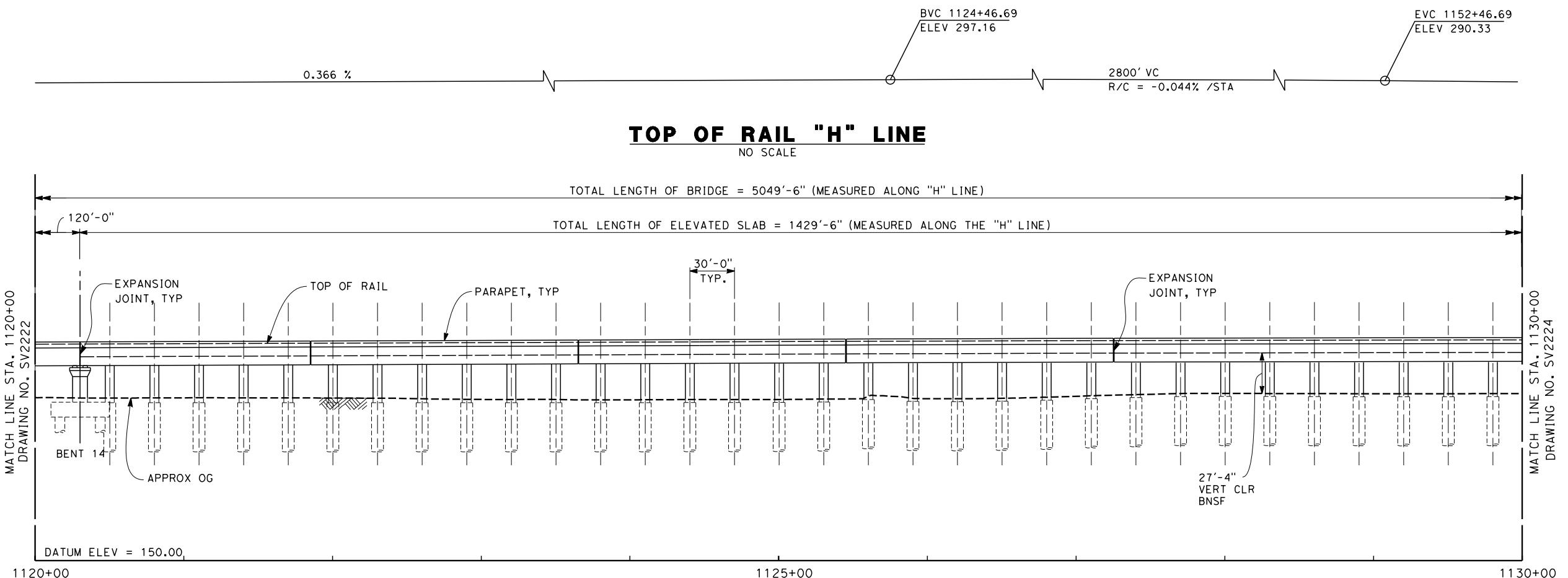
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD

HST STRUCTURES
INDEX OF SHEETS

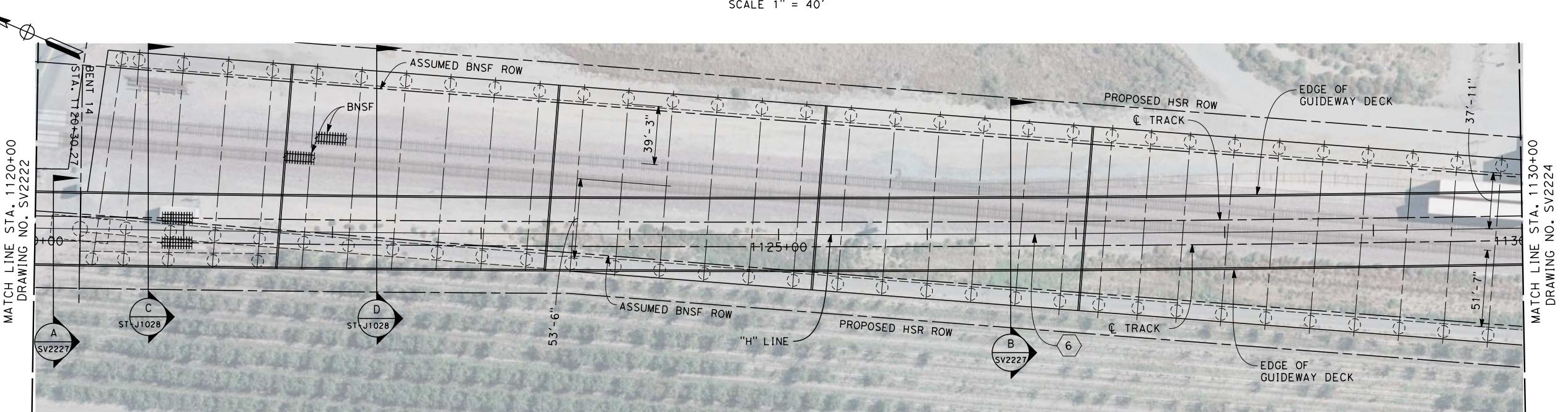
CONTRACT NO.
HSR 06-0003
DRAWING NO.
GE-A0030
SCALE
NO SCALE
SHEET NO.

NOTES

1. NOT ALL FILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLP
CONTINUOUS SPANS - BCC - PRECAST
IN-SITU
STEEL TRUSS - IN-SITU, SLID
OR LAUNCHED
ELEVATED SLABS - PC BEAM AND
IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

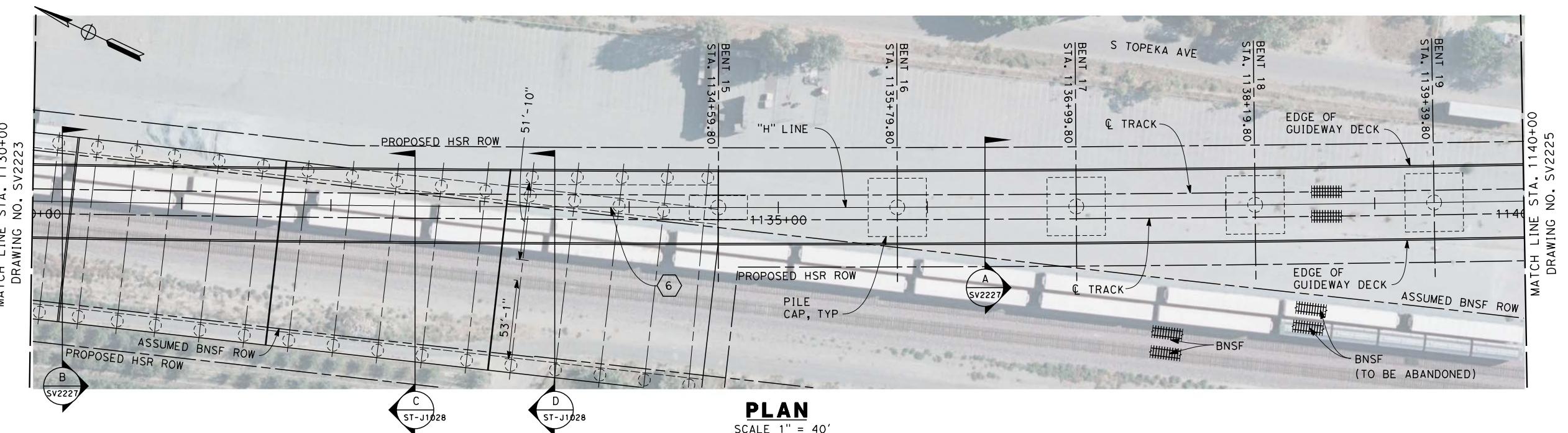
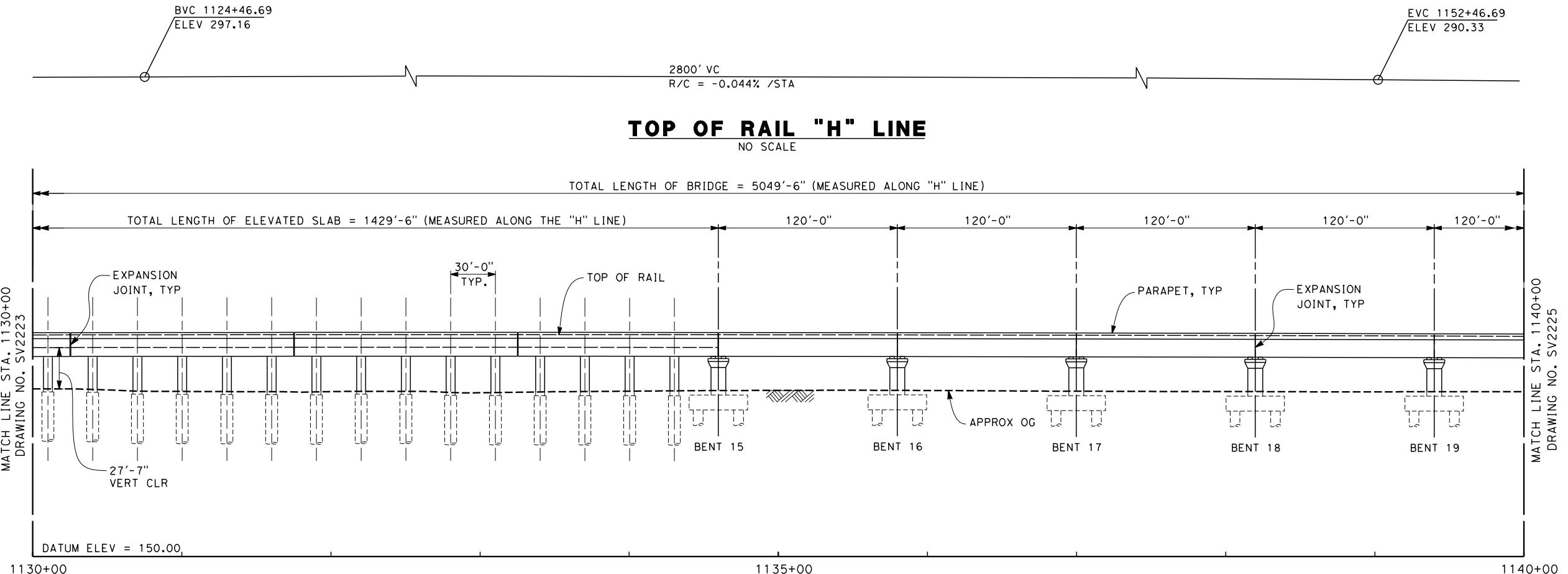


ELEVATION
SCALE 1" = 40'

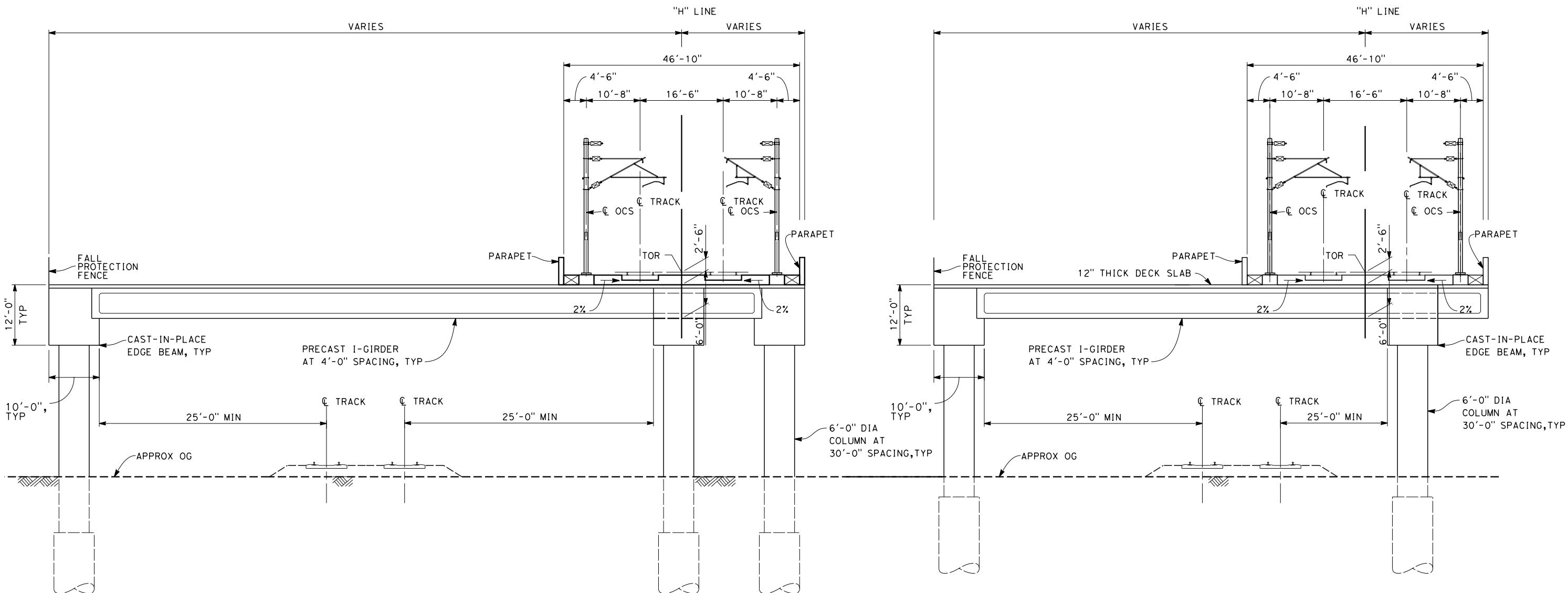


PLAN
SCALE 1" = 40'

DESIGNED BY Y. REN	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD HANFORD SUBSECTION ALIGNMENT H CONEJO VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION				DRAWING NO. ST-J1023
CHECKED BY O. LIU					SCALE
IN CHARGE R. COFFIN					AS SHOWN
DATE 05/30/14					SHEET NO.
REV	DATE	BY	CHK	APP	
				DESCRIPTION	



DESIGNED BY Y. REN	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD HANFORD SUBSECTION ALIGNMENT H CONEJO VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION				DRAWING NO. ST-J1024
CHECKED BY O. LIU					SCALE AS SHOWN
IN CHARGE R. COFFIN					SHEET NO.
DATE 05/30/14					
REV	DATE	BY	CHK	APP	DESCRIPTION



SECTION C

SCALE: 1" = 10'

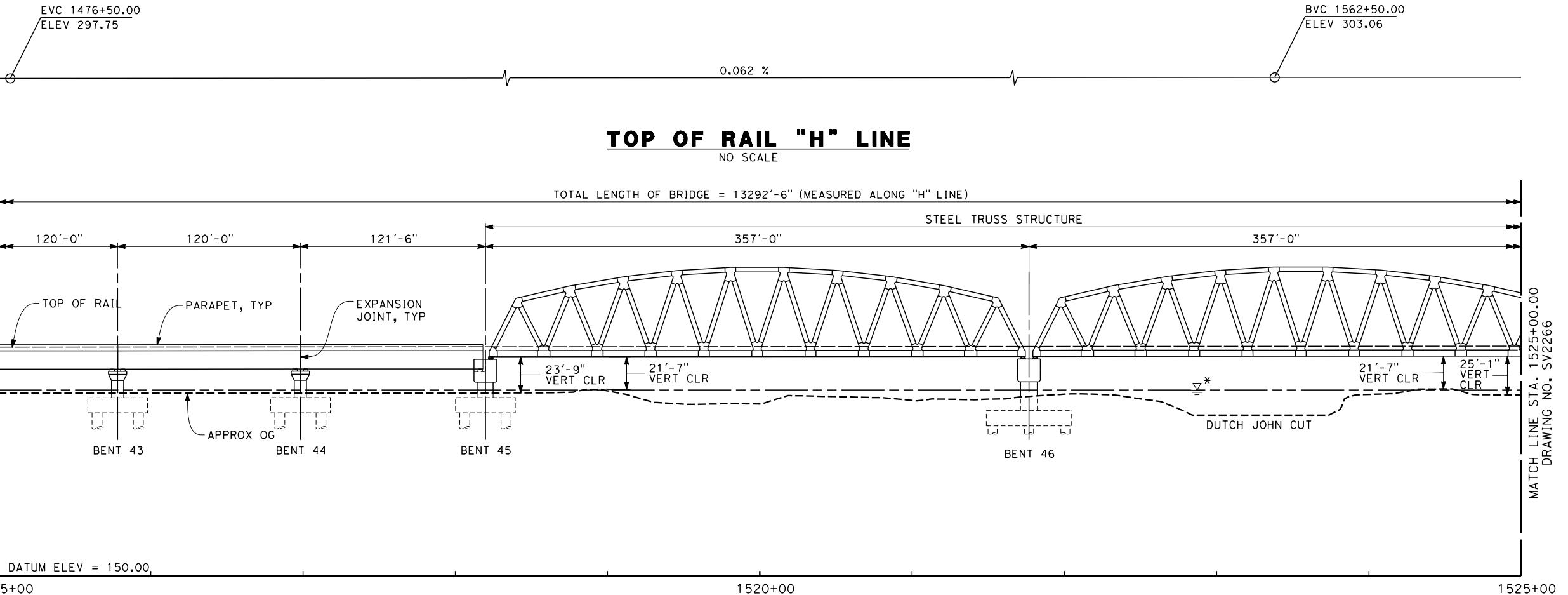
STA 1120+30 THROUGH 1121+65
STA 1133+20 THROUGH 1134+60

SECTION D

SCALE: 1" = 10'

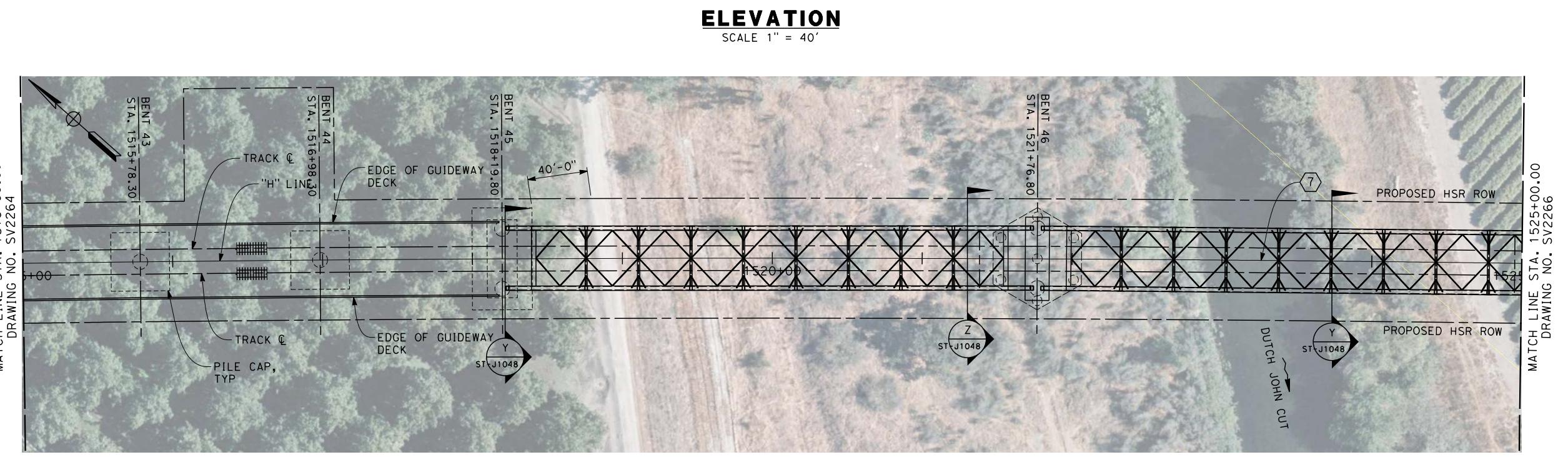
STA 1121+65 THROUGH 1123+50
STA 1132+10 THROUGH 1133+20

DESIGNED BY Y. REN	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD HANFORD SUBSECTION ALIGNMENT H CONEJO VIADUCT TYPICAL SECTIONS	CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION				DRAWING NO. ST-J1028
CHECKED BY O. LIU					SCALE AS SHOWN
IN CHARGE R. COFFIN					SHEET NO.
DATE 05/30/14					
REV	DATE	BY	CHK	APP	DESCRIPTION



NOTES

1. NOT ALL FILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPMS
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



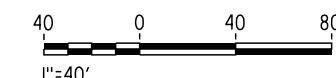
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA



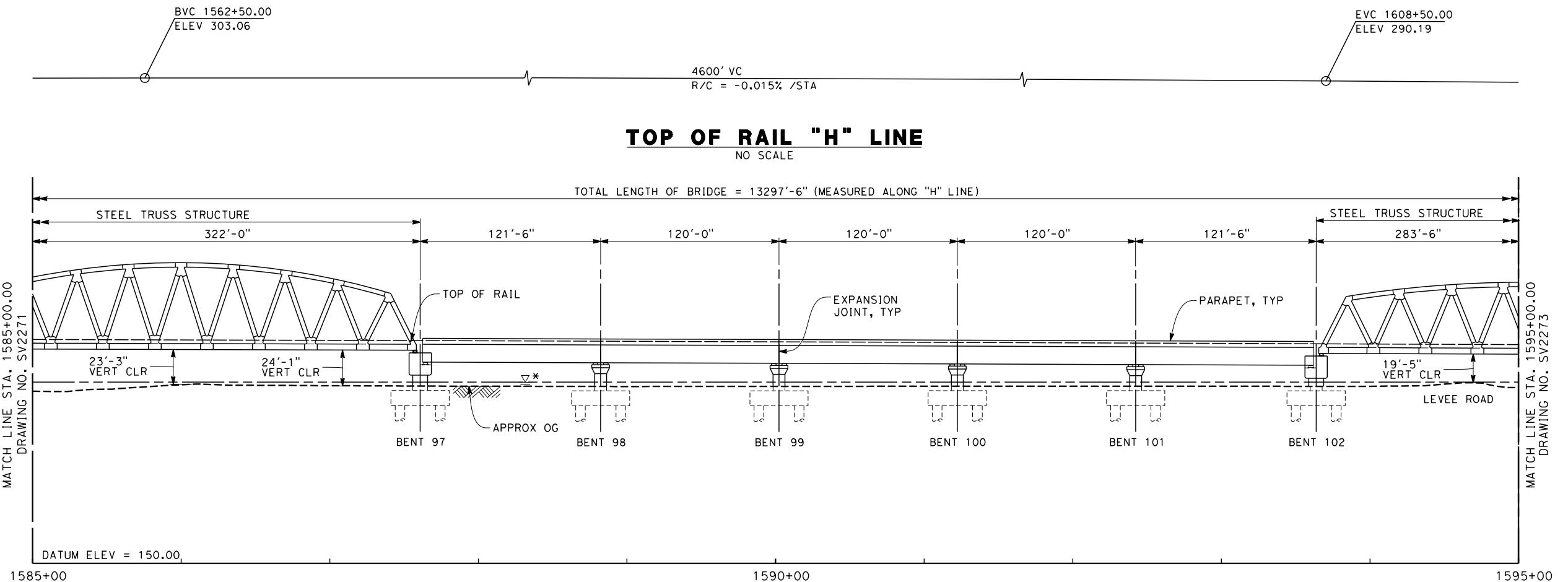
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Δ = 58° 05' 38.8"
T = 20271.5'
L = 37008.6'



PLAN

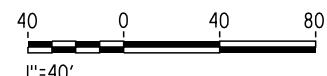
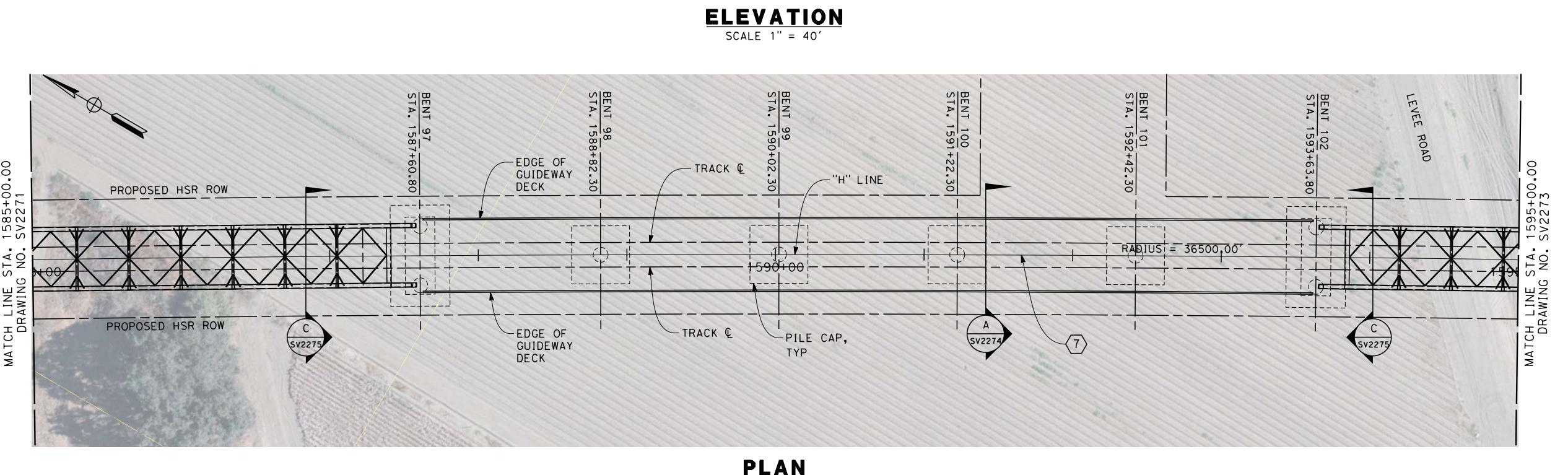
SCALE 1" = 40'

USER\$	DATE	BY	CHK	APP	DESCRIPTION	DESIGNED BY Y. REN	DRAWN BY F. PALERMO	CHECKED BY O. LIU	IN CHARGE R. COFFIN	PROPOSED PRELIMINARY DESIGN	NOT FOR CONSTRUCTION	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD	HANFORD SUBSECTION ALIGNMENT H KINGS RIVER VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003	DRAWING NO. ST-J1037	SCALE AS SHOWN	SHEET NO.
REV	DATE	BY	CHK	APP	DESCRIPTION	05/30/14													

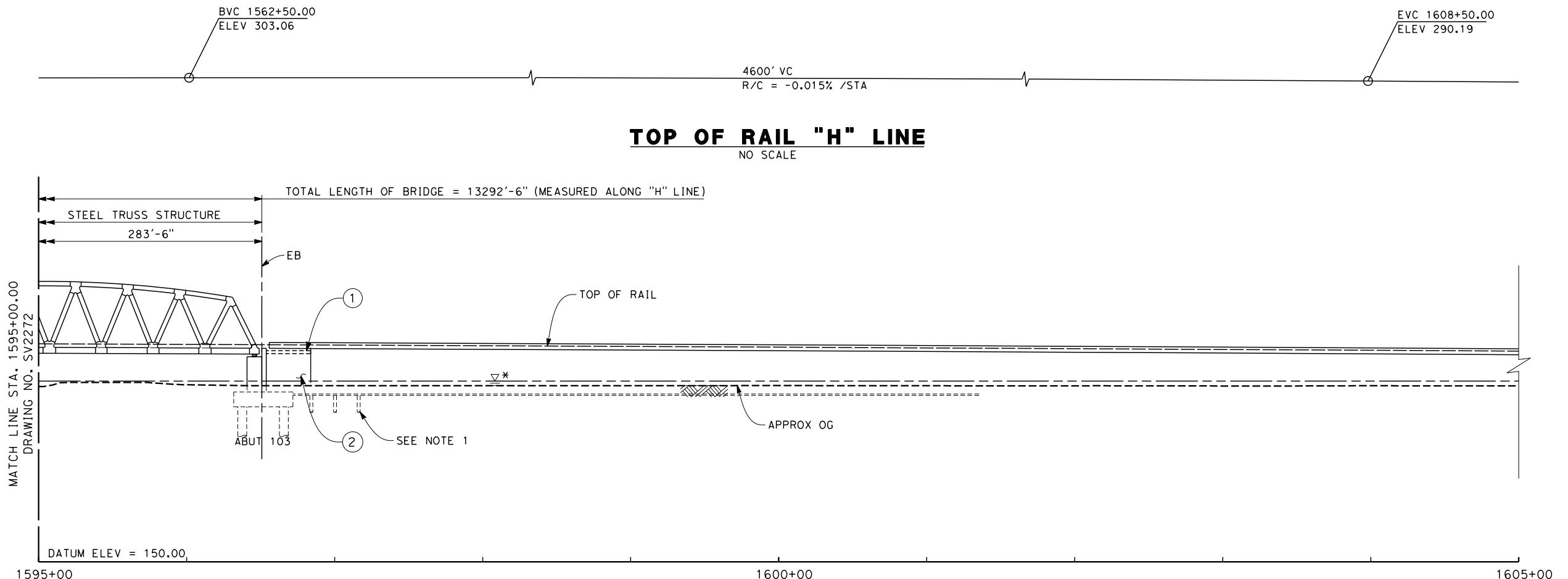


NOTES

1. NOT ALL FILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLP
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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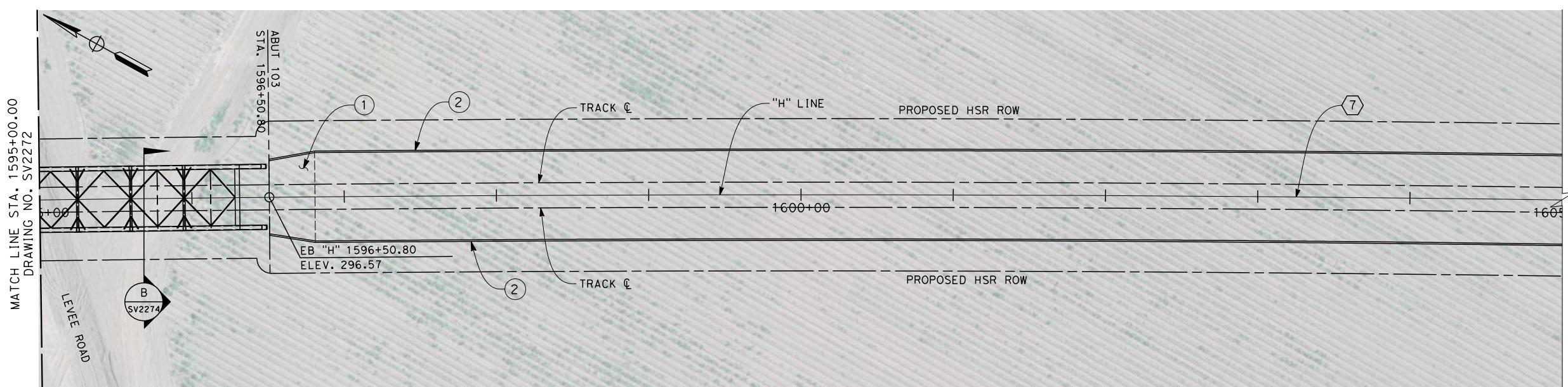


DESIGNED BY Y. REN	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD HANFORD SUBSECTION ALIGNMENT H KINGS RIVER VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION				DRAWING NO. ST-J1044
CHECKED BY O. LIU					SCALE AS SHOWN
IN CHARGE R. COFFIN					SHEET NO. 1
DATE 05/30/14					
REV	DATE	BY	CHK	APP	DESCRIPTION



ELEVATION

SCALE 1" = 40'



PLAN

SCALE 1" = 40

DESIGNED	Y. RE
DRAWN B	F. PA
Q. LI	CHECKED
R. CO	IN CHARGE
DATE	05

**PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

HANFORD SUBSECTION
ALIGNMENT H
KINGS RIVER VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J1045
SCALE
AS SHOWN
SHEET NO.

OTES
NOT ALL PILES SHOWN

PILE LENGTH TO BE
DETERMINED

SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLP
CONTINUOUS SPANS - BCC - PRECAST
IN-SITU
STEEL TRUSS - INSITU, SLID
OR LAUNCHED
ELEVATED SLABS - PC BEAM AND
INSITU SLAB

UTILITY LOCATIONS TO BE
DETERMINED

ACCESS STAIRWAYS ARE
PROVIDED AT SYSTEMS SITES
(APPROX. 2.5 MILE INTERVALS).
LADDER ACCESS TO VIADUCTS IS
PROVIDED AT 2500 FT INTERVALS
WITH ACCESS ROAD AND TURNING
CIRCLE WHERE NECESSARY.

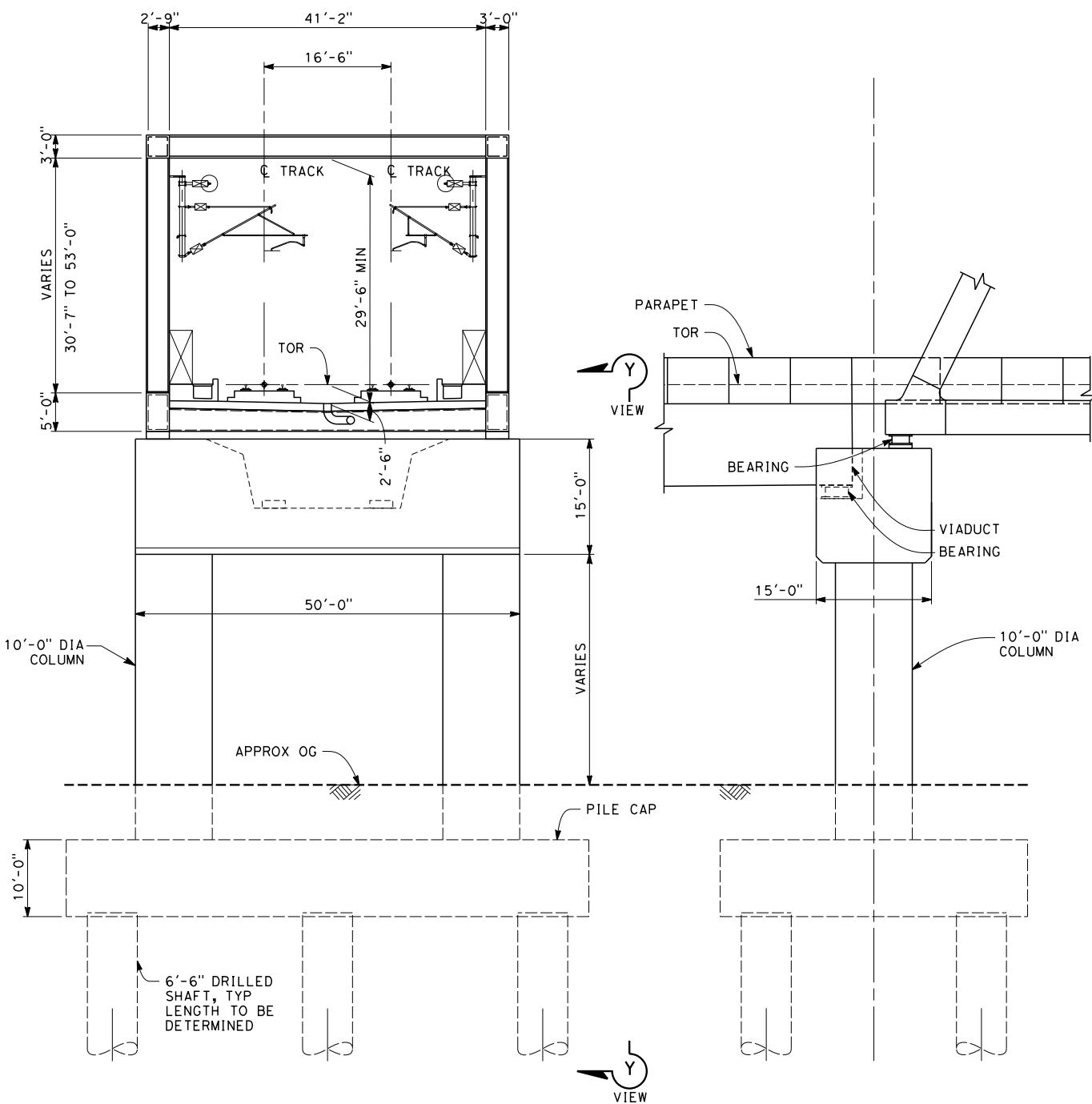
LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

$$\begin{array}{c} \textcircled{7} \\ \textcircled{1} \\ \textcircled{2} \\ \textcircled{3} \end{array}$$

A horizontal number line with tick marks every 20 units, labeled -40, 0, 40, and 80. A vertical tick mark is placed halfway between the 0 and 40 labels, with the label $l''=40'$ written below it.



SECTION Y

SCALE: 1" = 10'

STA 1485+70 THROUGH 1489+27
STA 1518+30 THROUGH 1525+44
STA 1580+97 THROUGH 1587+31
STA 1593+34 THROUGH 1596+52

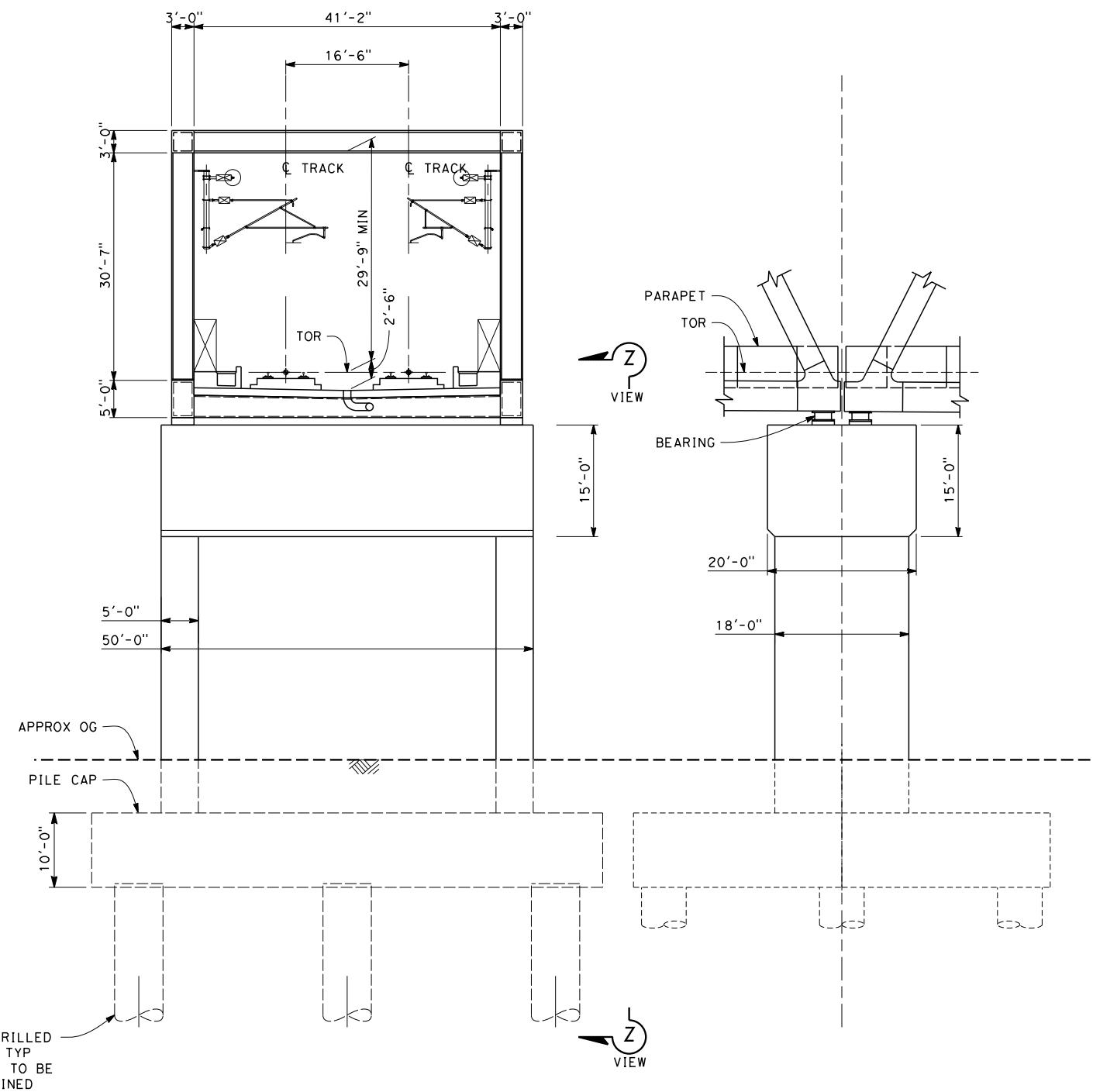
ELEVATION DETAIL Y

**PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

HANFORD SUBSECTION
ALIGNMENT H
KINGS RIVER VIADUCT
TYPICAL SECTIONS



SECTION 2

SCALE: 1" = 10

STA 1521+87 (BENT 46)

ELEVATION DETAIL Z

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J1048
SCALE
AS SHOWN
SHEET NO.

MONMOUTH

CONEJO

LATON

HANFORD



REV	DATE	BY	CHK	APP	DESCRIPTION
					05/30/14

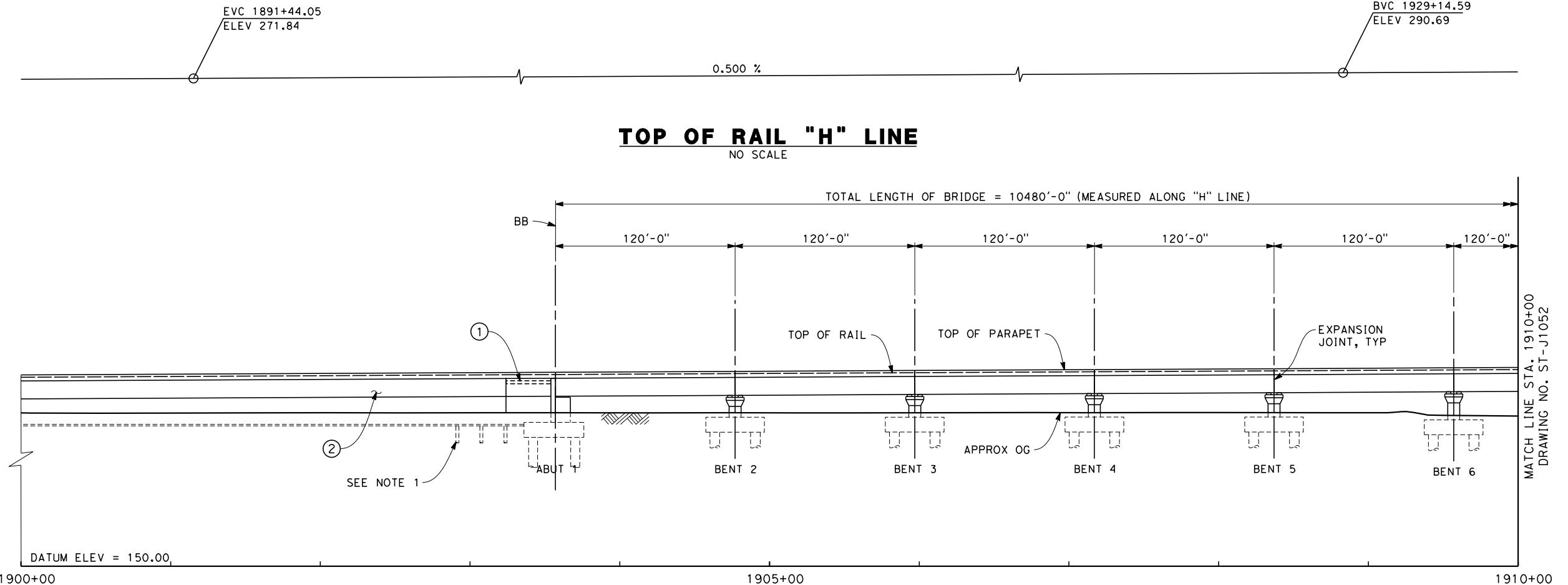
DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION



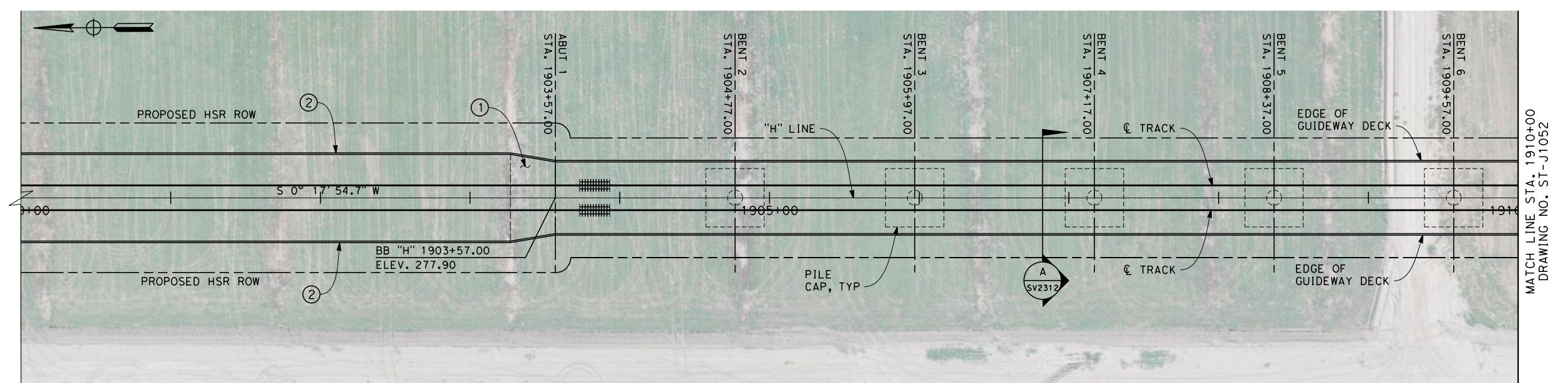
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD SUBSECTION
ALIGNMENT H
HANFORD VIADUCT
KEY MAP

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J1050
SCALE
AS SHOWN
SHEET NO.



NOTES

1. NOT ALL FILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPN
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
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6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED



LEGEND:

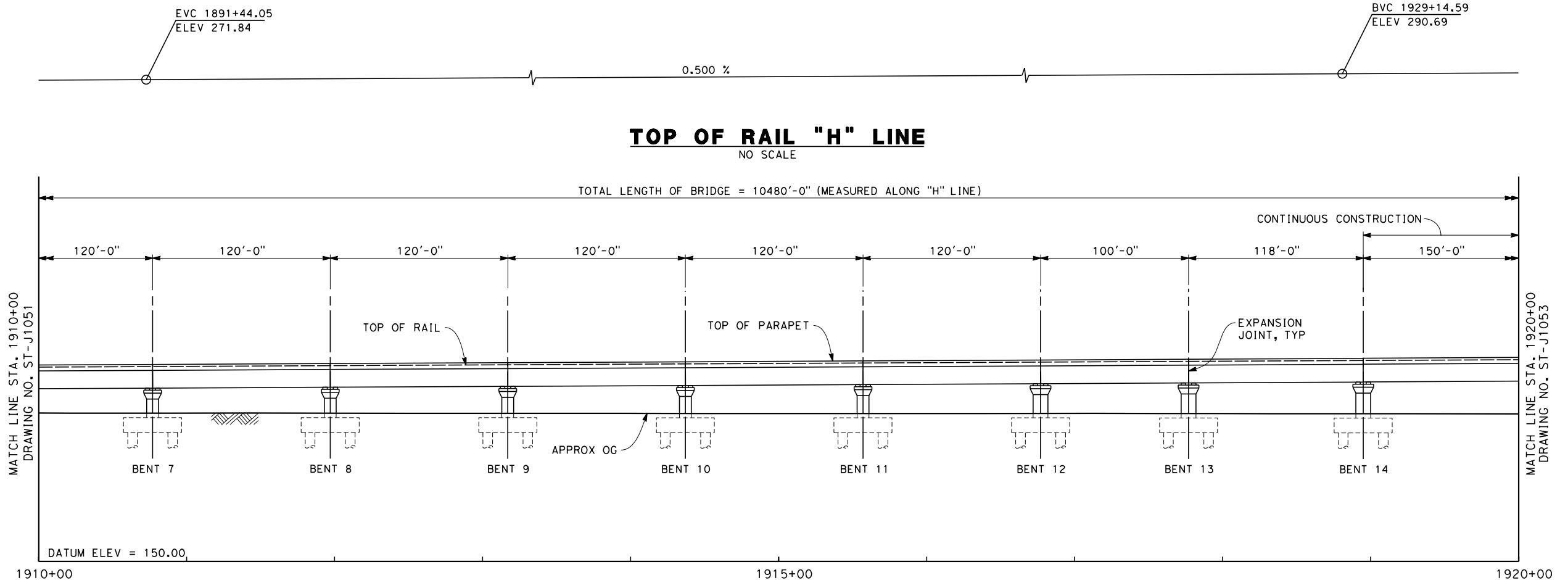
- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL

* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

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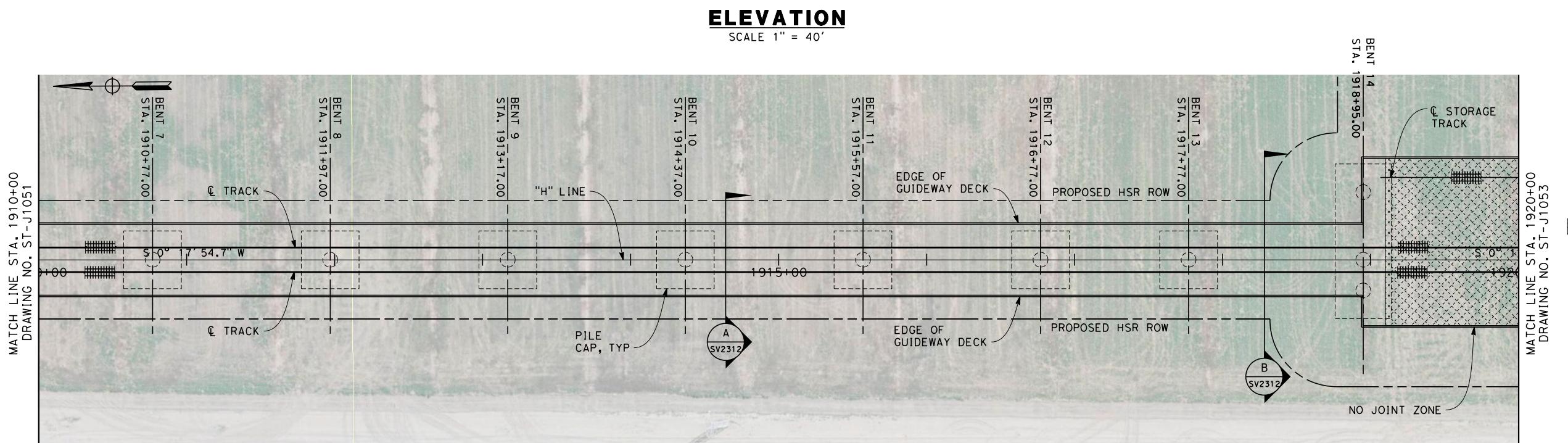
REV	DATE	BY	CHK	APP	DESCRIPTION	DESIGNED BY M. FISHER	DRAWN BY F. PALERMO	CHECKED BY A. ARMSTRONG	IN CHARGE R. COFFIN	PROPOSED PRELIMINARY DESIGN	NOT FOR CONSTRUCTION	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD HANFORD SUBSECTION ALIGNMENT H HANFORD VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003	DRAWING NO. ST-J1051	SCALE AS SHOWN	SHEET NO.





NOTES

1. NOT ALL FILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPMS
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
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6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED



LEGEND:

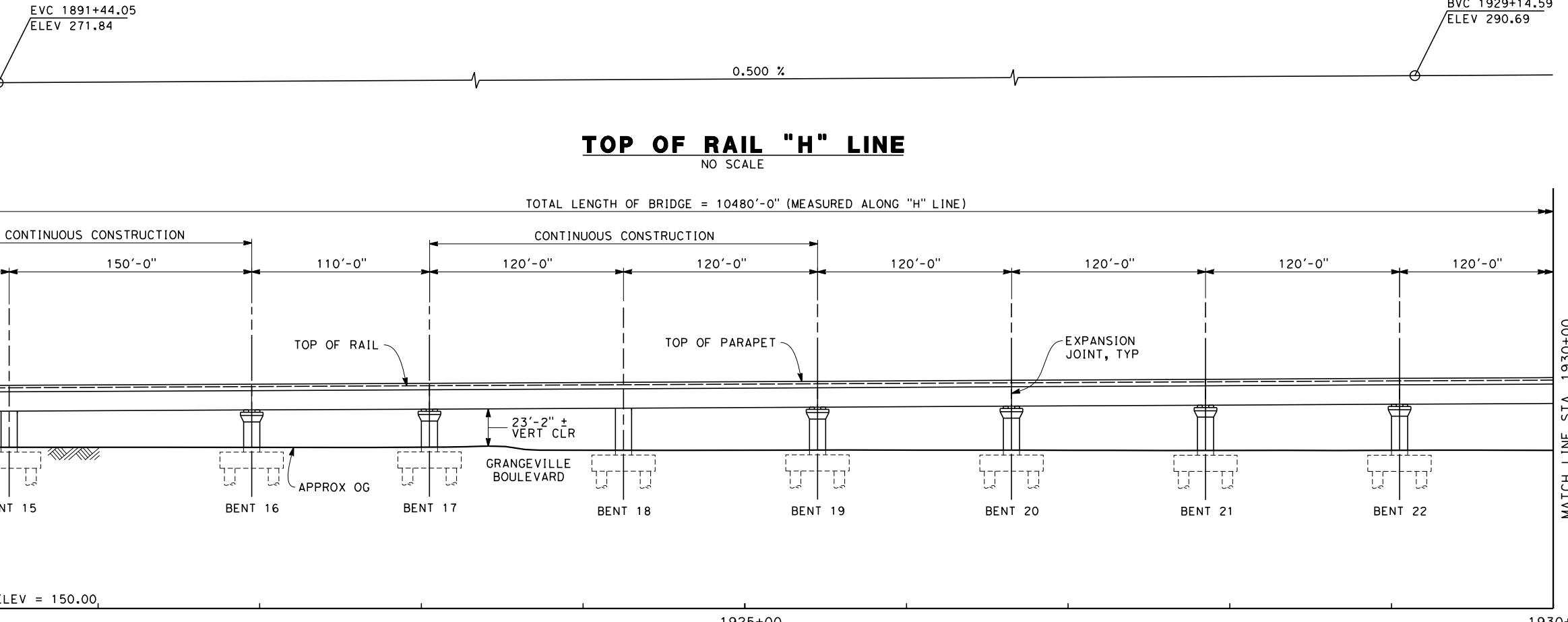
- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL

* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

NO JOINT ZONE

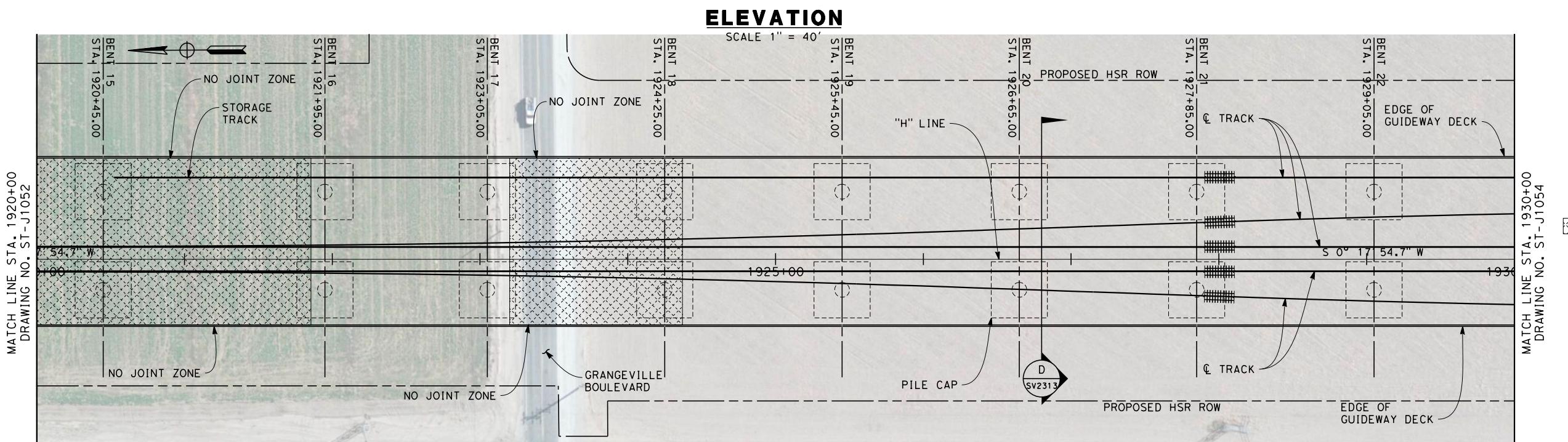


REV	DATE	BY	CHK	APP	DESCRIPTION	DESIGNED BY M. FISHER	DRAWN BY F. PALERMO	CHECKED BY A. ARMSTRONG	IN CHARGE R. COFFIN	PROPOSED PRELIMINARY DESIGN	NOT FOR CONSTRUCTION	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD	HANFORD SUBSECTION ALIGNMENT H	HANFORD VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003	DRAWING NO. ST-J1052	SCALE AS SHOWN	SHEET NO.



NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPMS
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL

* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

NO JOINT ZONE

40 0 40 80
1"=40'

DESIGNED BY M. FISHER	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD	CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION	CALIFORNIA HIGH-SPEED TRAIN		HANFORD SUBSECTION ALIGNMENT H	DRAWING NO. ST-J1053
CHECKED BY A. ARMSTRONG				HANFORD VIADUCT PLAN AND ELEVATION	SCALE AS SHOWN
IN CHARGE R. COFFIN					SHEET NO.
DATE 05/30/14					
REV	DATE	BY	CHK	APP	DESCRIPTION

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RVSS

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BVC 1929+14.59
ELEV 290.69

EVC 1941+14.59
ELEV 293.69

TOP OF RAIL "H" LINE

NO SCALE

TOTAL LENGTH OF BRIDGE = 10480'-0" (MEASURED ALONG "H" LINE)

MATCH LINE STA. 1930+00
DRAWING NO. ST-J1053

DRAWING NO. ST-J1055

1930+00

1935+00

1940+00

TOP OF RAIL "H" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 10480'-0" (MEASURED ALONG "H" LINE)

BENT 23 BENT 24 BENT 25 APPROX OG BENT 26 BENT 27 BENT 28 BENT 29 BENT 30 BENT 3

120'-0" 120'-0" 120'-0" 120'-0" 120'-0" 120'-0" 120'-0" 120'-0" 120'-0" 120'-0" 120'-0"

BVC 1929+14.59
ELEV 290.69

1200' VC
R/C = -0.042% /STA

ELEV 1944+14.59
ELEV 293.69

DATUM ELEV = 150.00

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.
6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED

02/2014

LEGENDA

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT"

MATCH LINE STA. 1930+00
DRAWING NO. ST-J1053

DRAWING NO. ST-J1055

PLAN

SCALE 1" = 400'

**PROPOSED
PRELIMINARY
DESIGN**

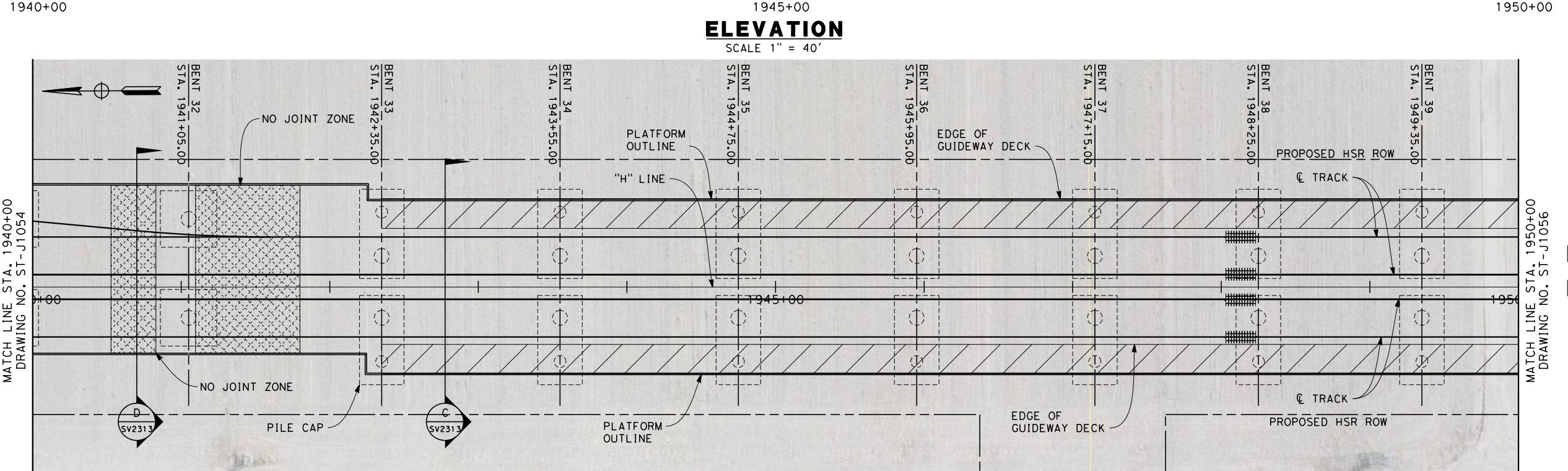
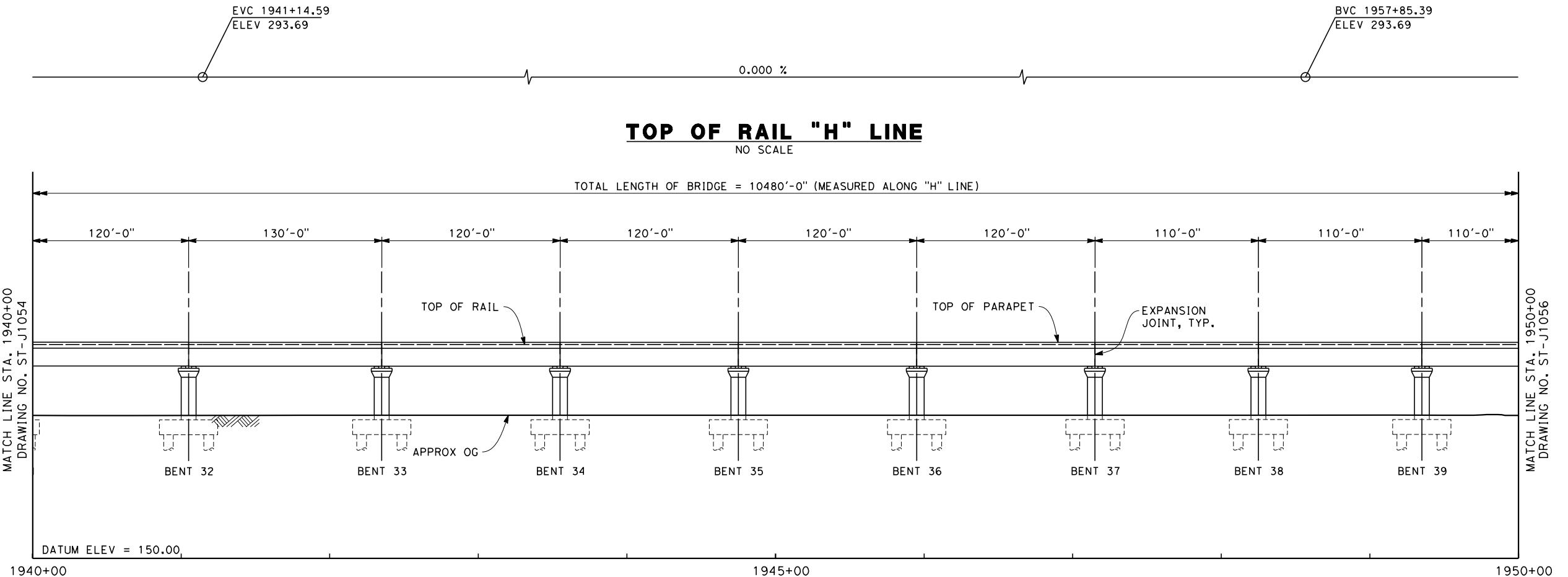
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

HANFORD SUBSECTION
ALIGNMENT H
HANFORD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.	HSR 06-0003
DRAWING NO.	ST-J1054
SCALE	AS SHOWN
SHEET NO.	



PLAN
SCALE 1" = 40'



REV	DATE	BY	CHK	APP	DESCRIPTION
					05/30/14

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
HANFORD SUBSECTION
ALIGNMENT H
HANFORD VIADUCT
PLAN AND ELEVATION

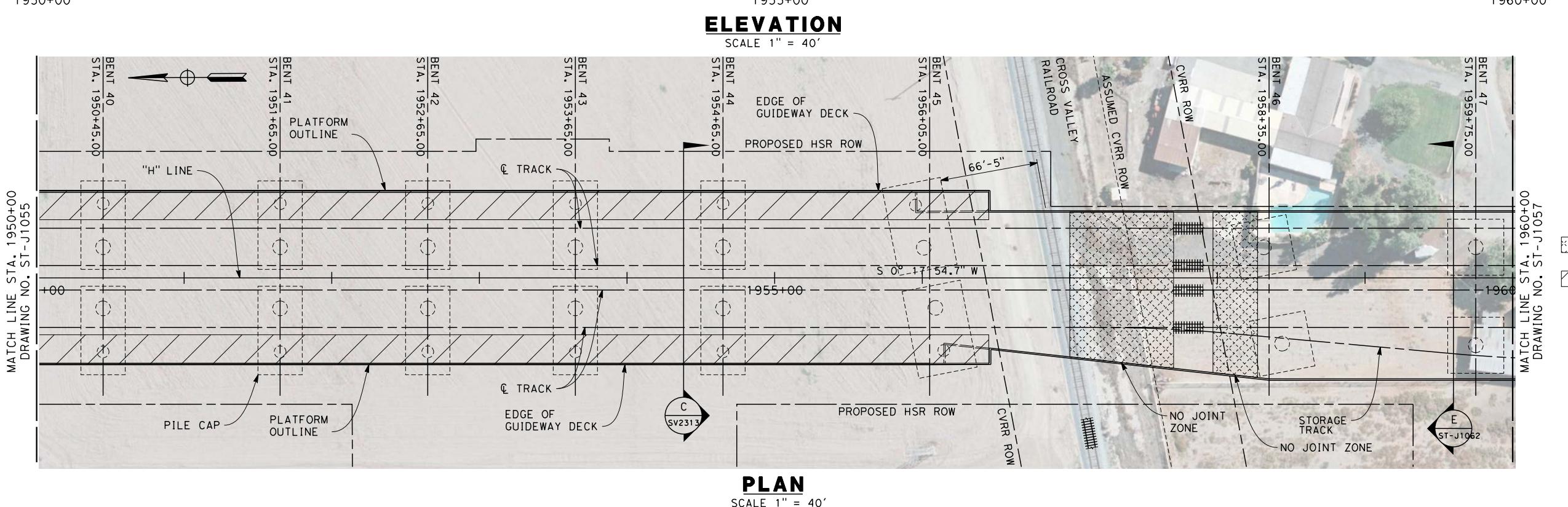
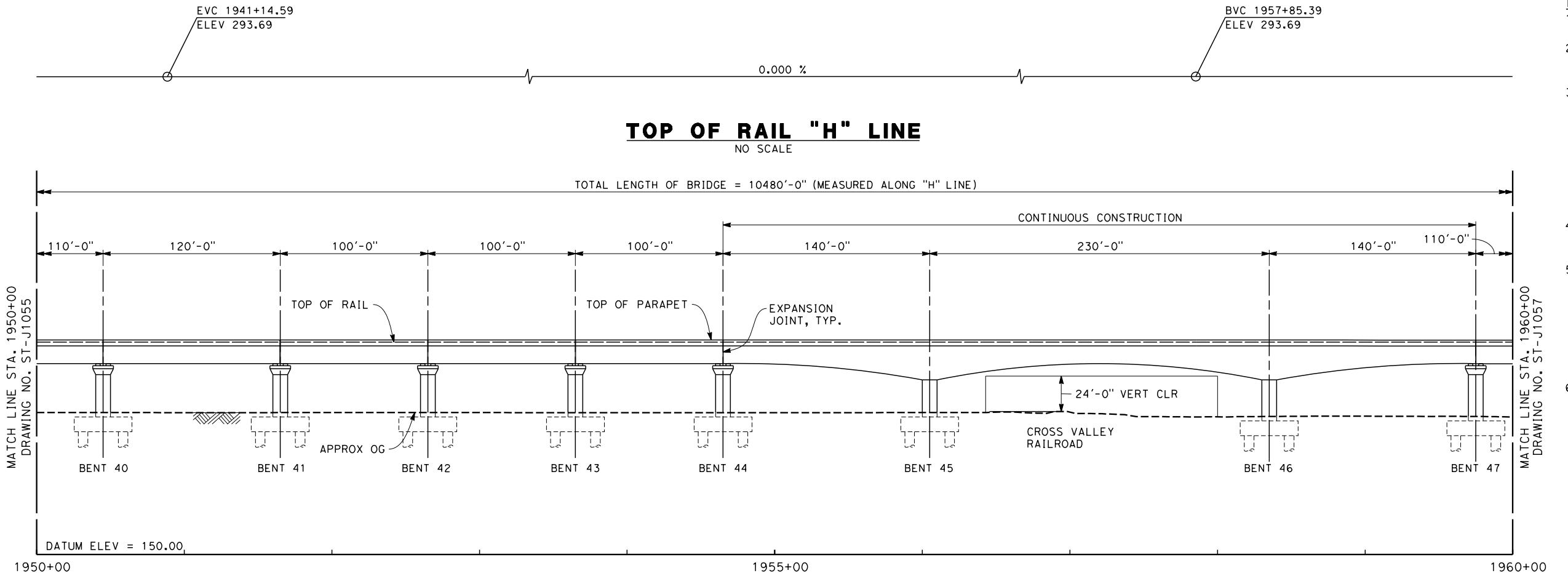
CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J1055
SCALE
AS SHOWN
SHEET NO.

NOTES

1. NOT ALL FILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UPON SIMPLE SPANS - MSS OR FPLM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.
6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED

NOTES

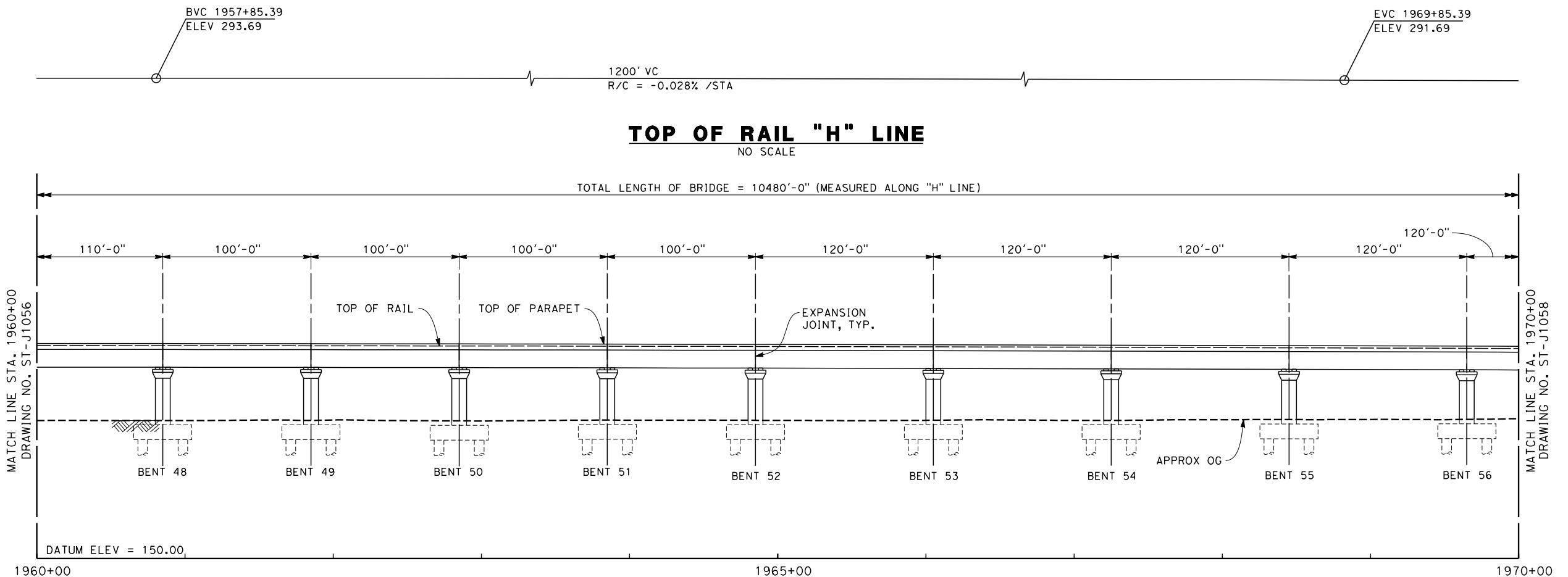
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLP
CONTINUOUS SPANS - BCC - PRECAST
IN-SITU
- STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
- ELEVATED SLABS - PC BEAM AND IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
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6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED



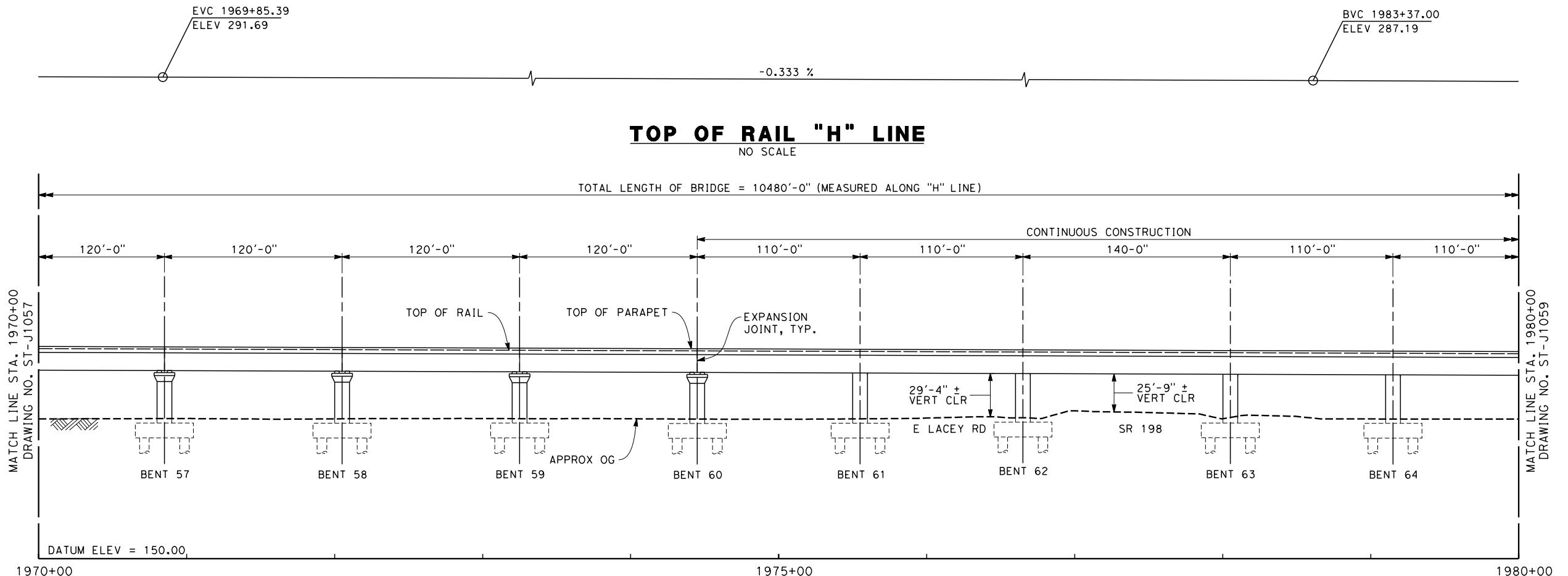
USER\$	DATE	BY	CHK	APP	DESCRIPTION	DESIGNED BY Y. REN DRAWN BY F. PALERMO CHECKED BY O. LIU IN CHARGE R. COFFIN DATE 05/30/14	PROPOSED PRELIMINARY DESIGN NOT FOR CONSTRUCTION	URS HMM ARUP CALIFORNIA HIGH-SPEED TRAIN	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD HANFORD SUBSECTION ALIGNMENT H HANFORD VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003 DRAWING NO. ST-J1056 SCALE AS SHOWN SHEET NO.
REV						PROPOSED PRELIMINARY DESIGN NOT FOR CONSTRUCTION					

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPN
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.
6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED

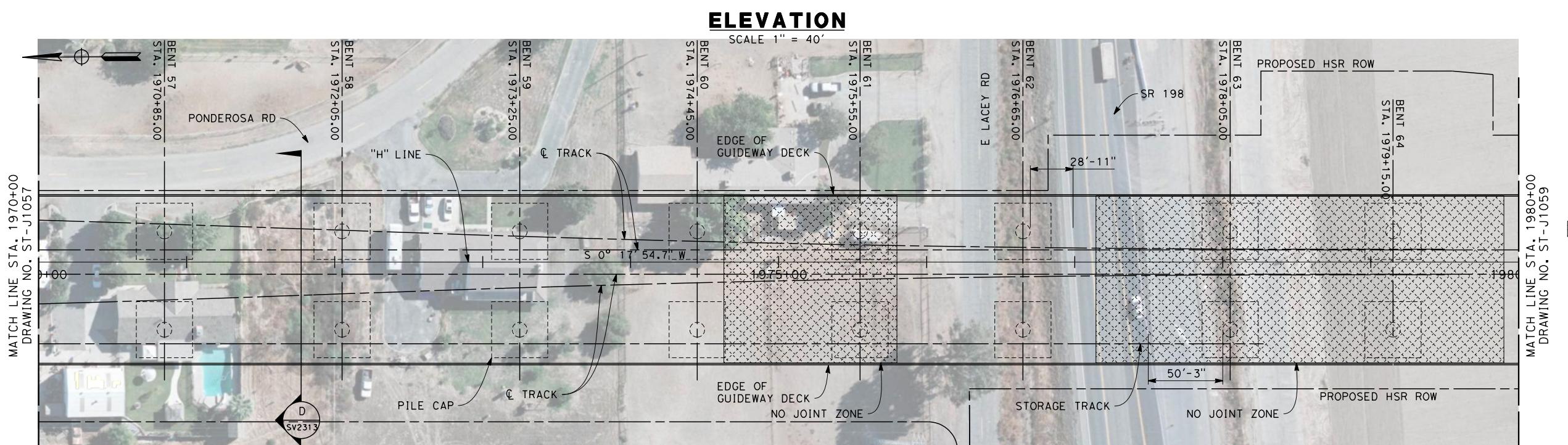


DESIGNED BY Y. REN	PROPOSED PRELIMINARY DESIGN	CALIFORNIA HIGH-SPEED TRAIN PROJECT			CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO	FRESNO TO BAKERSFIELD			DRAWING NO. ST-J1057	
CHECKED BY O. LIU	HANFORD SUBSECTION			SCALE AS SHOWN	
IN CHARGE R. COFFIN	ALIGNMENT H			SHEET NO.	
DATE 05/30/14	DESCRIPTION	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	DATE	05/30/14
REV	DATE	BY	CHK	APP	



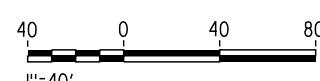
NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.
6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED



LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".
- NO JOINT ZONE



**PROPOSED
PRELIMINARY
DESIGN**

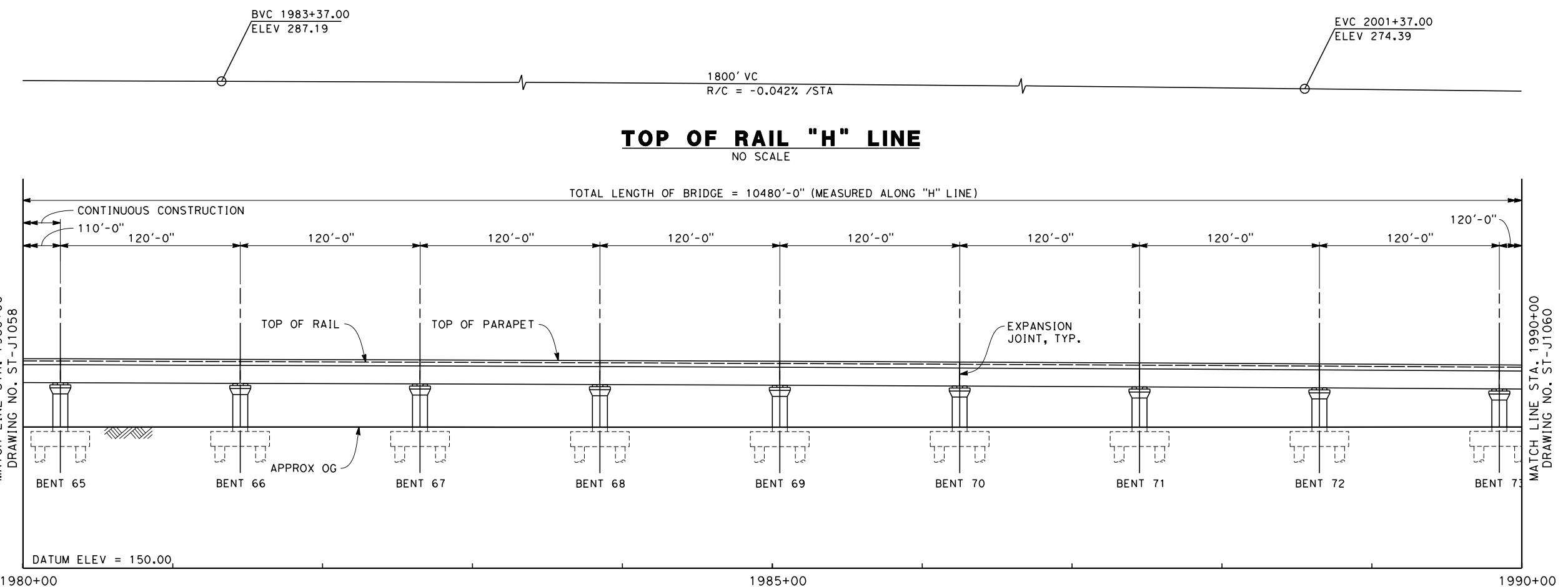
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

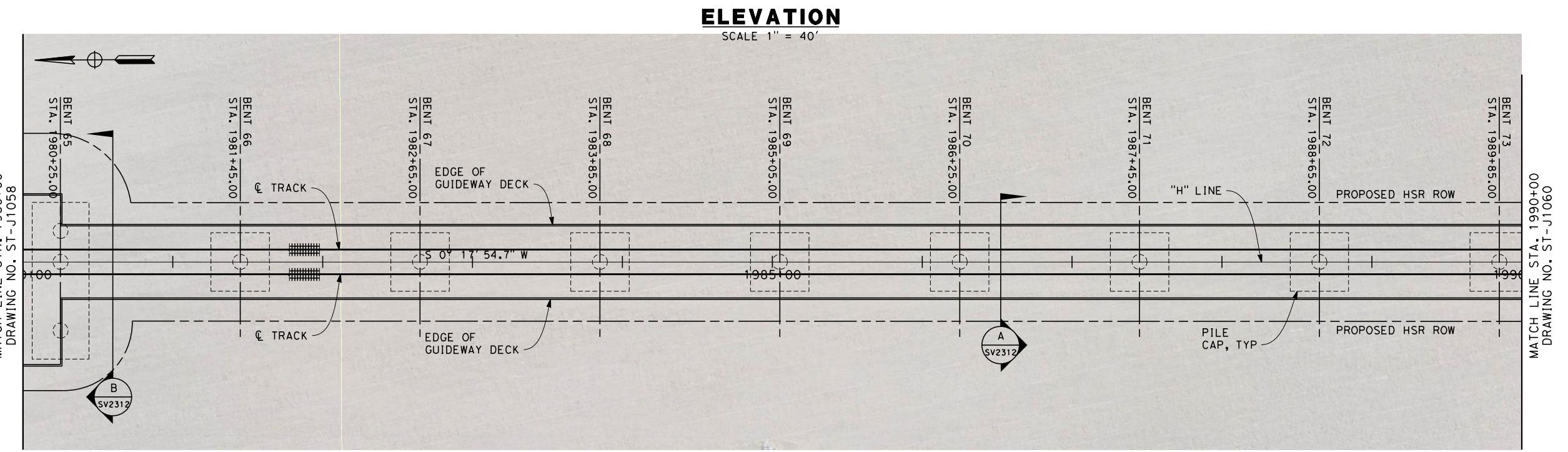
HANFORD SUBSECTION
ALIGNMENT H
HANFORD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J1058
SCALE
AS SHOWN
SHEET NO.



NOTES

1. NOT ALL FILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPN
CONTINUOUS SPANS - BCC - PRECAST
IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.
6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED



3:25:05 PM 6/2/2014

SPENBLSS \$PLTDRVS\$

CONTRACT NO. HSR 06-0003

DRAWING NO. ST-J1059

SCALE AS SHOWN

SHEET NO.

40 0 40 80
1"=40'

DESIGNED BY M. FISHER	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD	CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION			HANFORD SUBSECTION ALIGNMENT H HANFORD VIADUCT PLAN AND ELEVATION	DRAWING NO. ST-J1059
CHECKED BY A. ARMSTRONG					SCALE AS SHOWN
IN CHARGE R. COFFIN					SHEET NO.
DATE 05/30/14					
REV	DATE	BY	CHK	APP	DESCRIPTION

c:\pwworking\hmm\external\frank.palermo01-arup.com\d0186175\2S-FB-ST-J1060-H.dgn

rank.palermo 6/2/2014 3:25:40 PM \$PENTBLSS \$PLTDRVS\$

BVC 1983+37.00
ELEV 287.19

1800' VC

EVC 2001+37.00
ELEV 274.39

TOP OF RAIL "H" LINE

NO SCALE

TOTAL LENGTH OF BRIDGE = 10480'-0" (MEASURED ALONG "H" LINE)

MATCH LINE STA. 1990+00
GROWING NO. ST 11252

1990+00

1995+00

2000+00

TOTAL LENGTH OF BRIDGE = 10480'-0" (MEASURED ALONG "H" LINE)

120'-0" 112'-0" 120'-0" 120'-0" 120'-0" 120'-0" 120'-0" 100'-0" 100'-0" 100'-0" 120'-0"

TOP OF RAIL

TOP OF PARAPET

EXPANSION JOINT, TYP.

BENT 74 BENT 75 APPROX OG BENT 76 BENT 77 BENT 78 BENT 79 BENT 80 BENT 81 BENT

MATCH LINE STA. 2000+00
DRAWING NO. ST-J1061

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPML
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.
6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED

0/2014

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT"

MATCH LINE STA. 1990+00
DRAWING NO. ST 11050

PLAN

DESIGNED
M. F.
DRAWN BY
F. PA
CHECKED
A. AR
IN CHARGE
R. CO
DATE
06

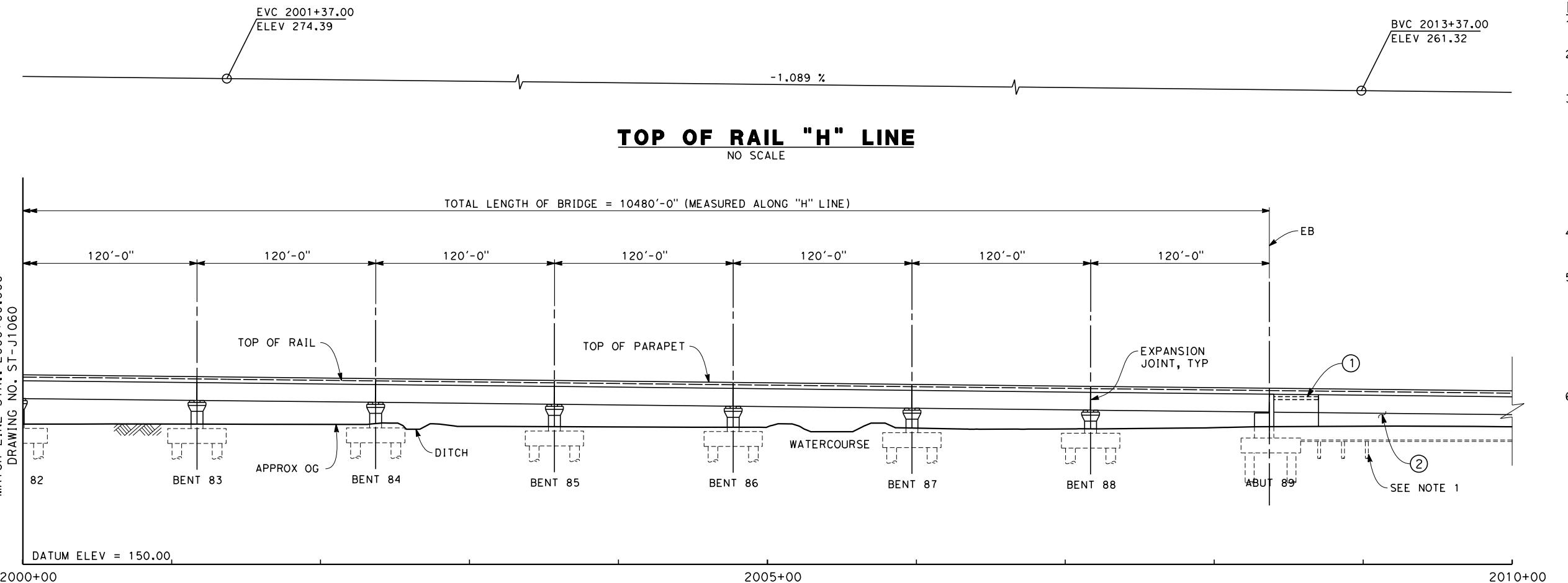
**PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

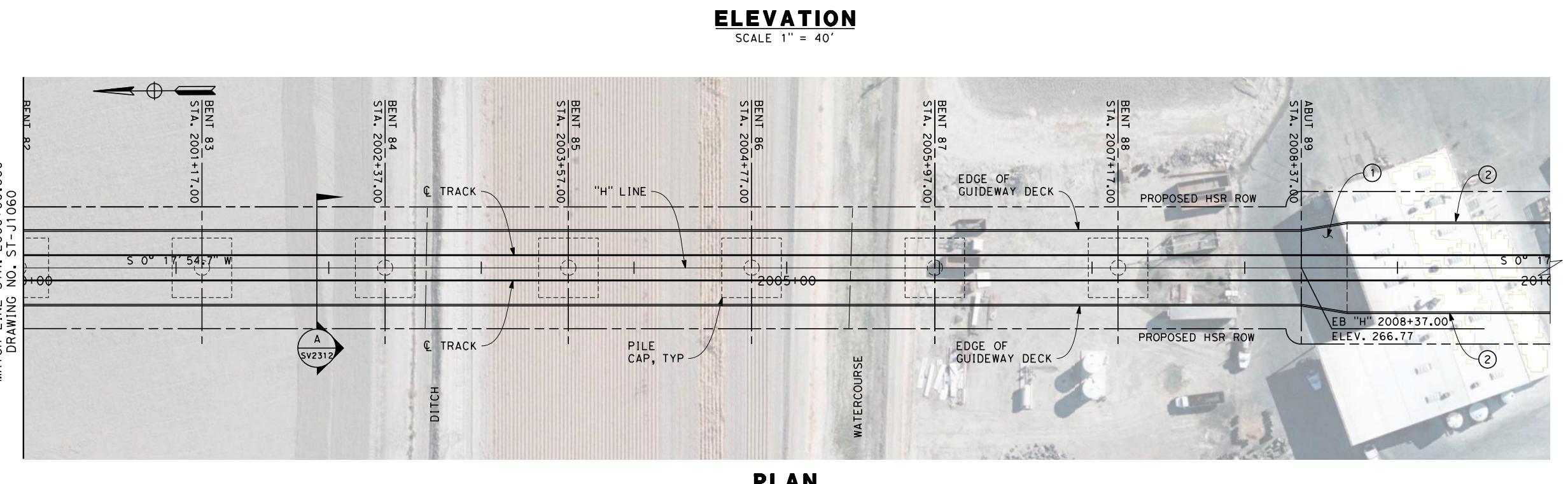
HANFORD SUBSECTION
ALIGNMENT H
HANFORD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.	HSR 06-0003
DRAWING NO.	ST-J1060
SCALE	AS SHOWN
SHEET NO.	



NOTES

1. NOT ALL FILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLP
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - IN-SITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND IN-SITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.
6. "NO JOINT ZONE" DELINEATES THE AREA OF THE SUPERSTRUCTURE THAT SPANS LESS THAN THE PERMITTED DISTANCE FROM THE POINT OF SWITCH WHERE STRUCTURE JOINTS ARE PREMITTED



LEGEND:

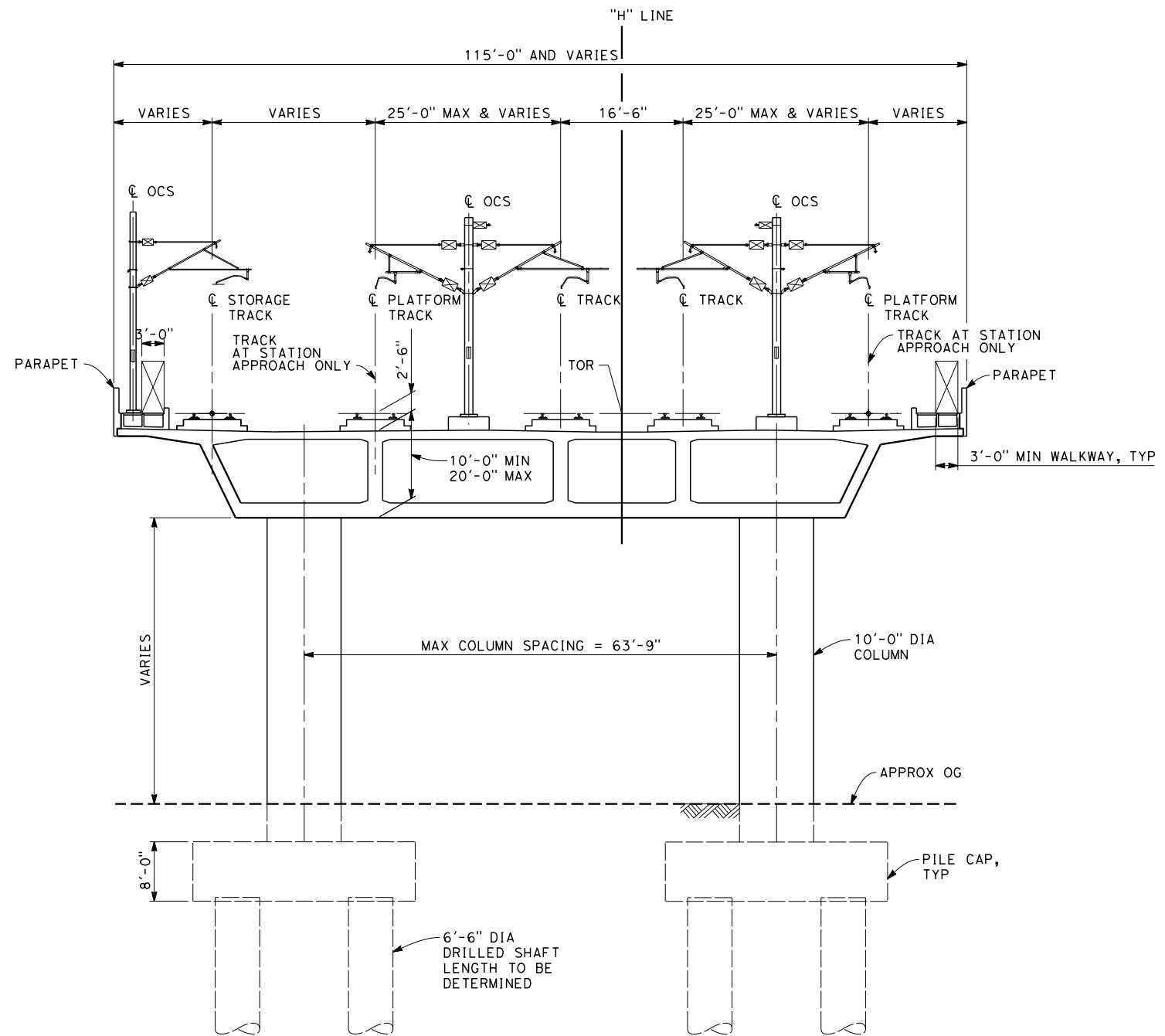
- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL

* ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

frank.palermo 6/2/2014 3:26:16 PM \$PNTBLSS \$PLTDRVS\$

REV	DATE	BY	CHK	APP	DESCRIPTION	DESIGNED BY M. FISHER	DRAWN BY F. PALERMO	CHECKED BY A. ARMSTRONG	IN CHARGE R. COFFIN	PROPOSED PRELIMINARY DESIGN	NOT FOR CONSTRUCTION	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD HANFORD SUBSECTION ALIGNMENT H HANFORD VIADUCT PLAN AND ELEVATION	CONTRACT NO. HSR 06-0003	DRAWING NO. ST-J1061	SCALE AS SHOWN	SHEET NO.

RFP No.: 13-57 - Addendum No. 2 - 06/30/2014



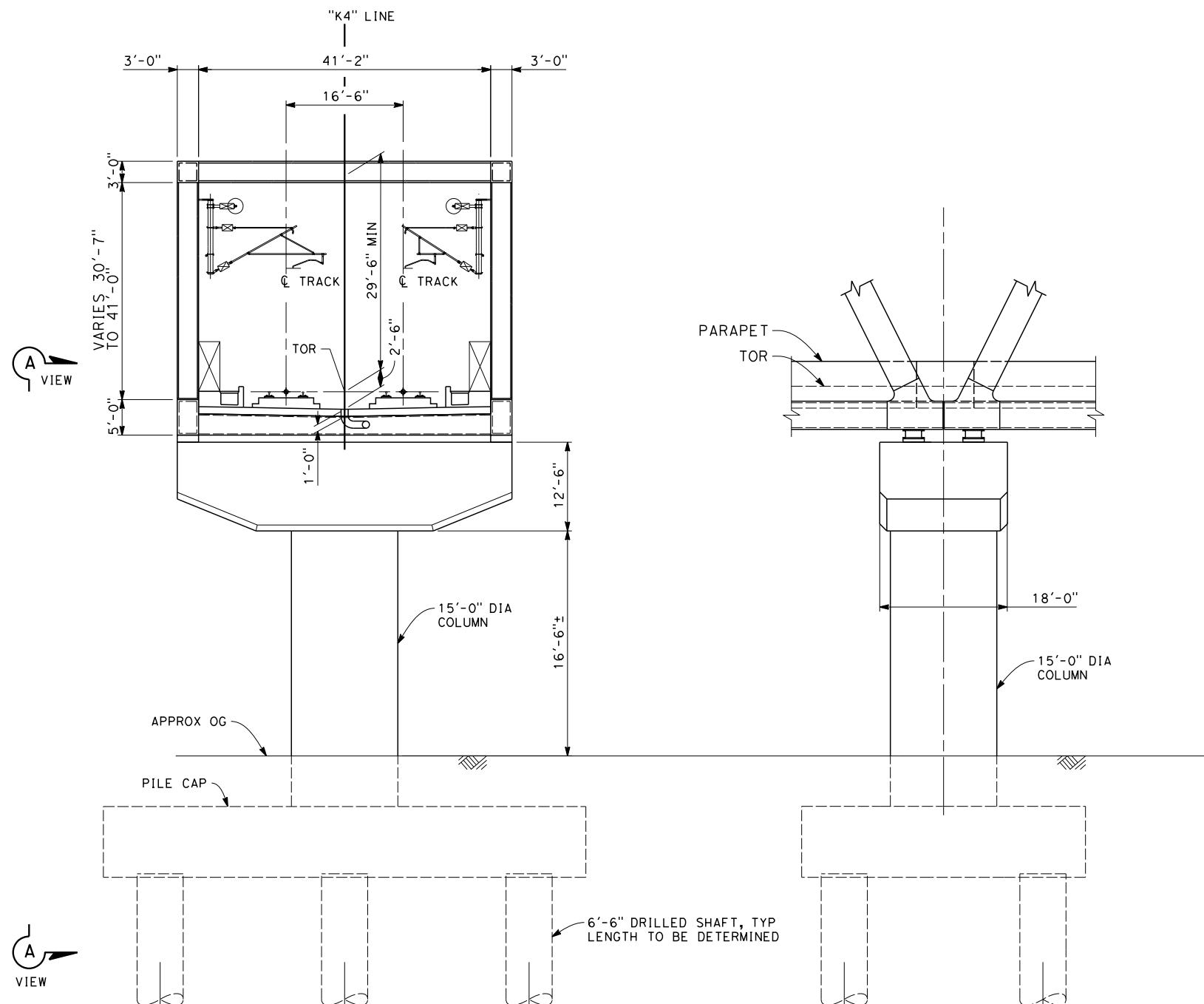
SECTION E

SCALE: 1" = 10'

STA 1954+65 THROUGH 1959+75



DESIGNED BY Y. REN	PROPOSED PRELIMINARY DESIGN NOT FOR CONSTRUCTION	 	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD HANFORD SUBSECTION ALIGNMENT H HANFORD VIADUCT TYPICAL SECTIONS						CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO									DRAWING NO. ST-J1062
CHECKED BY Q. LIU									SCALE AS SHOWN
IN CHARGE R. COFFIN									SHEET NO.
DATE 05/30/14									
REV DATE BY CHK APP DESCRIPTION									



SECTION A

SCALE: 1" = 10

ELEVATION DETAIL A

SCALE: 1" = 100'

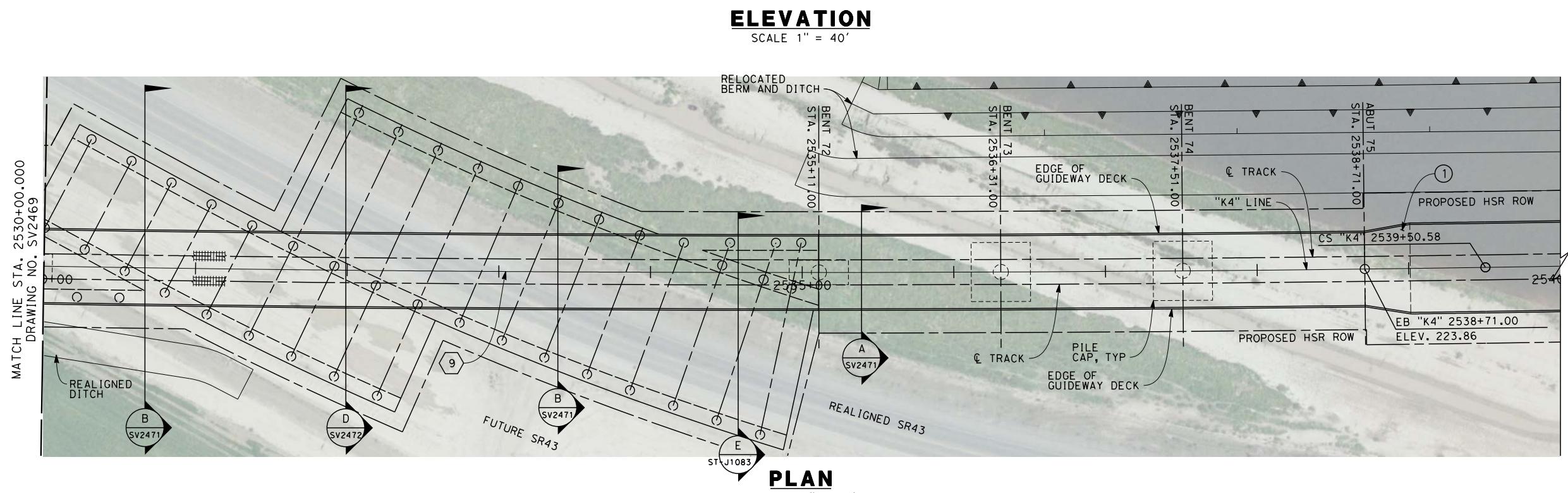
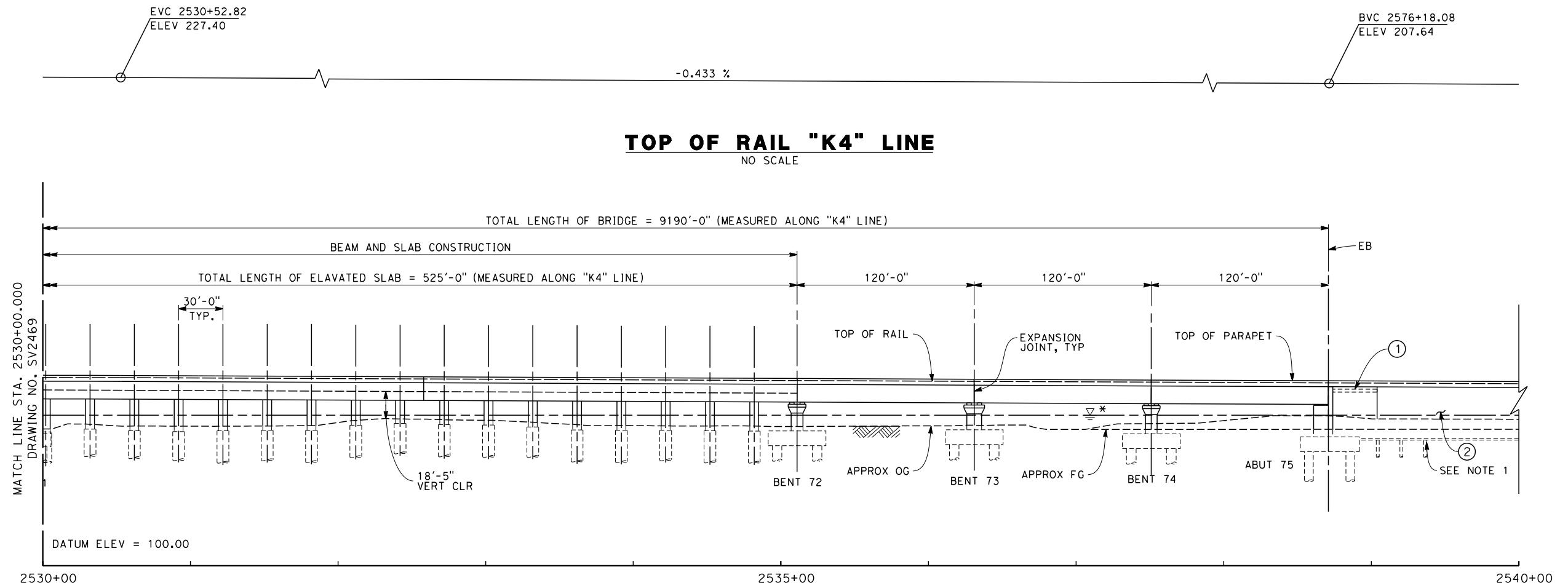
\$DATE\$							DESIGNED BY Y. REN
\$USER\$							DRAWN BY F. PALERMO
							CHECKED BY O. LIU
							IN CHARGE R. COFFIN
							DATE 05/30/
REV	DATE	BY	CHK	APP	DESCRIPTION		



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

**KAWeah SUBSECTION
ALIGNMENT K4
STATE ROUTE 43 UNDERPASS
TYPICAL SECTIONS**

CONTRACT NO.	HSR 06-0003
DRAWING NO.	ST-J1067
SCALE	AS SHOWN
SHEET NO.	



- NOTES
 - NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 - UTILITY LOCATIONS TO BE DETERMINED
 - ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

9

R = 30500.00'

Δ = 49° 01' 18.3"

T = 13906.6'

L = 26095.5'

A horizontal scale with tick marks at 40, 0, 40, and 80. The scale is broken between the 40 and 80 marks. Below the scale, the text 'l''=40' is written.

DESIGNED	Y. RE
DRAWN BY	F. PA
CHECKED	Q. LI
IN CHARGE	R. CO
DATE	05

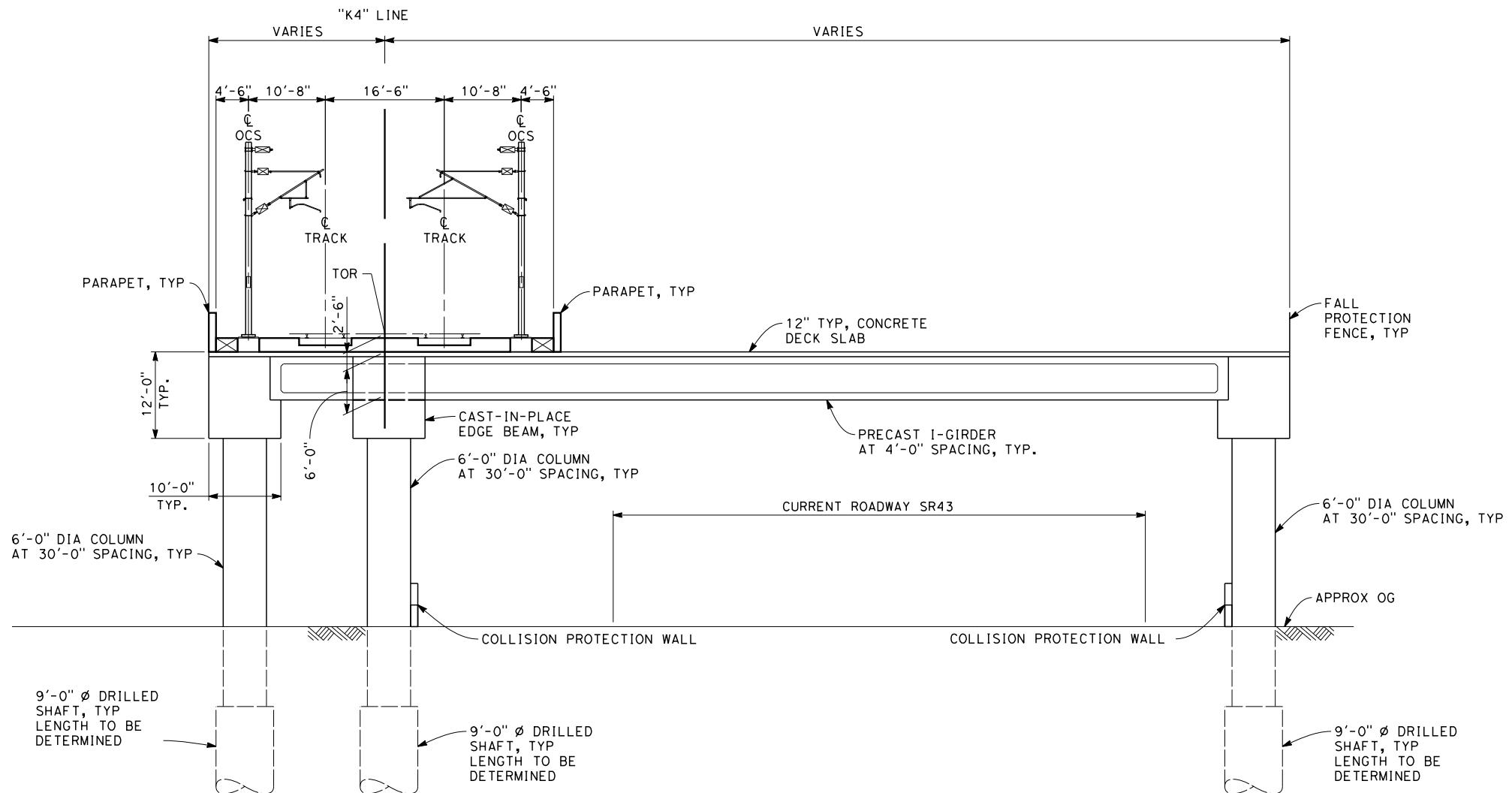
**PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWeah SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J1080
SCALE
AS SHOWN
SHEET NO.



SECTION E

SCALE: 1" = 10'

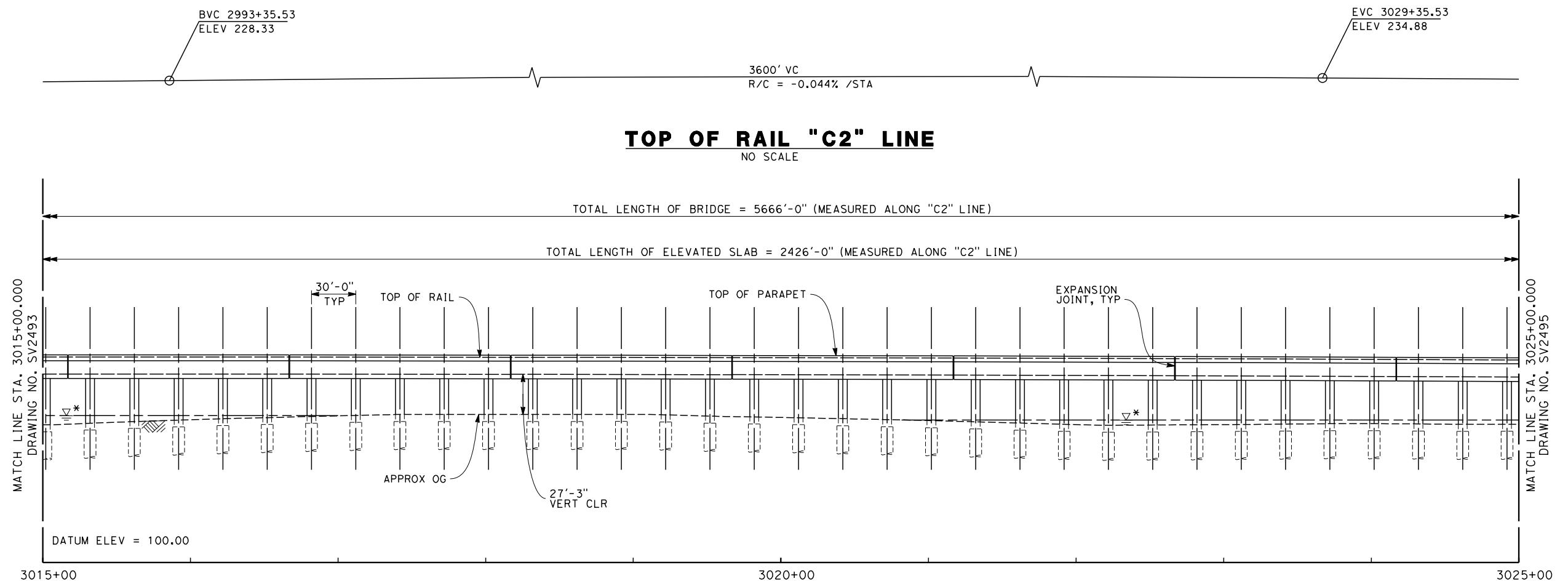
STA 2531+50.00 THROUGH 2532+80.00



DESIGNED BY Y. REN	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP			
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION	CALIFORNIA HIGH-SPEED RAIL AUTHORITY			
CHECKED BY O. LUI					
IN CHARGE R. COFFIN					
DATE 05/30/14					
REV	DATE	BY	CHK	APP	DESCRIPTION

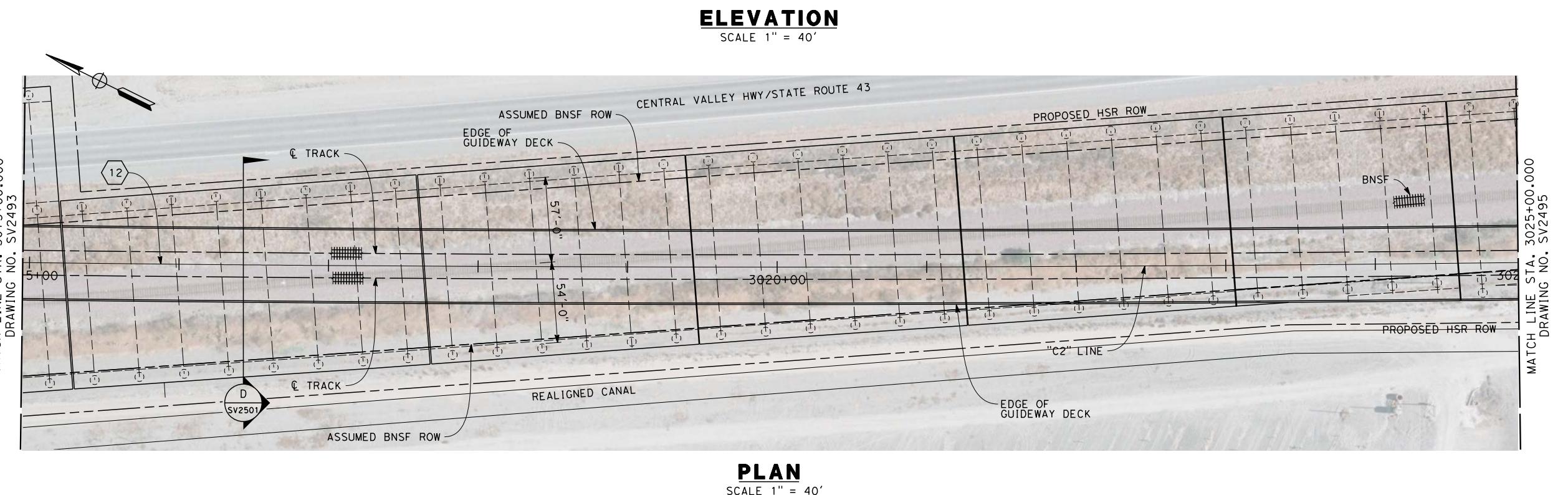
CONTRACT NO. HSR 06-0003
DRAWING NO. ST-J1083
SCALE
AS SHOWN
SHEET NO.

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
KAWeah SUBSECTION
ALIGNMENT K4
CROSS CREEK VIADUCT
TYPICAL SECTIONS



NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON SIMPLE SPANS - MSS OR FLP
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



USER\$

DATE

REV **DATE** **BY** **CHK** **APP** **DESCRIPTION**

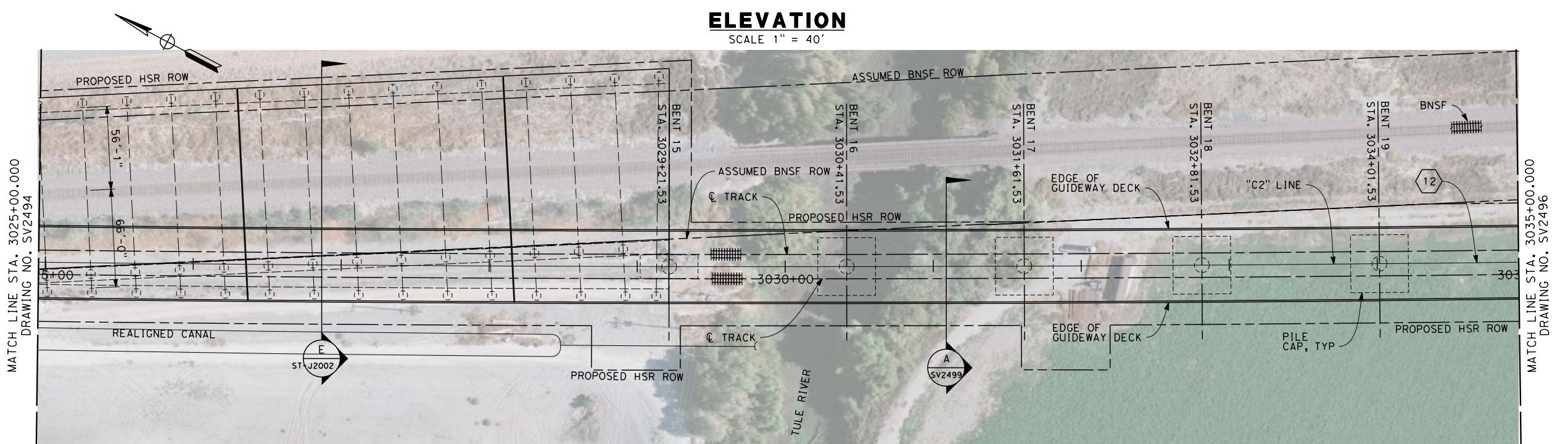
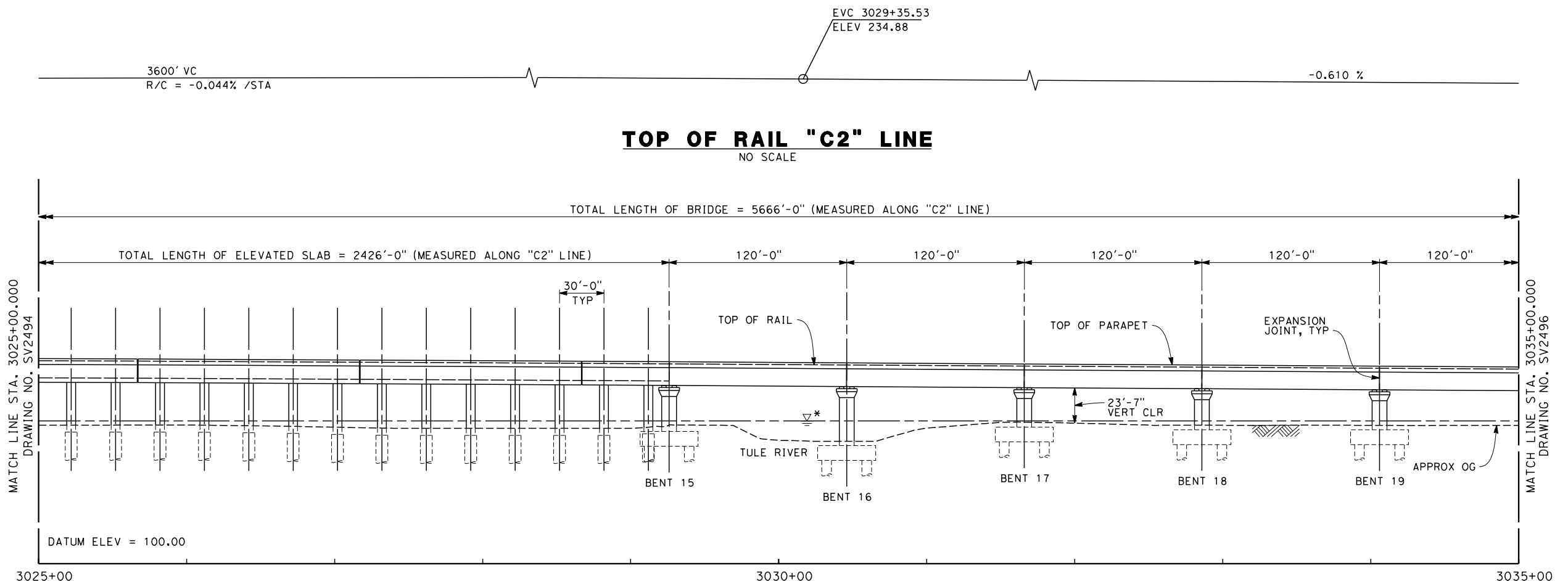
DESIGNED BY
Y. REN
DRAWN BY
F. PALERMO
CHECKED BY
O. LIU
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J1094
SCALE
AS SHOWN
SHEET NO.



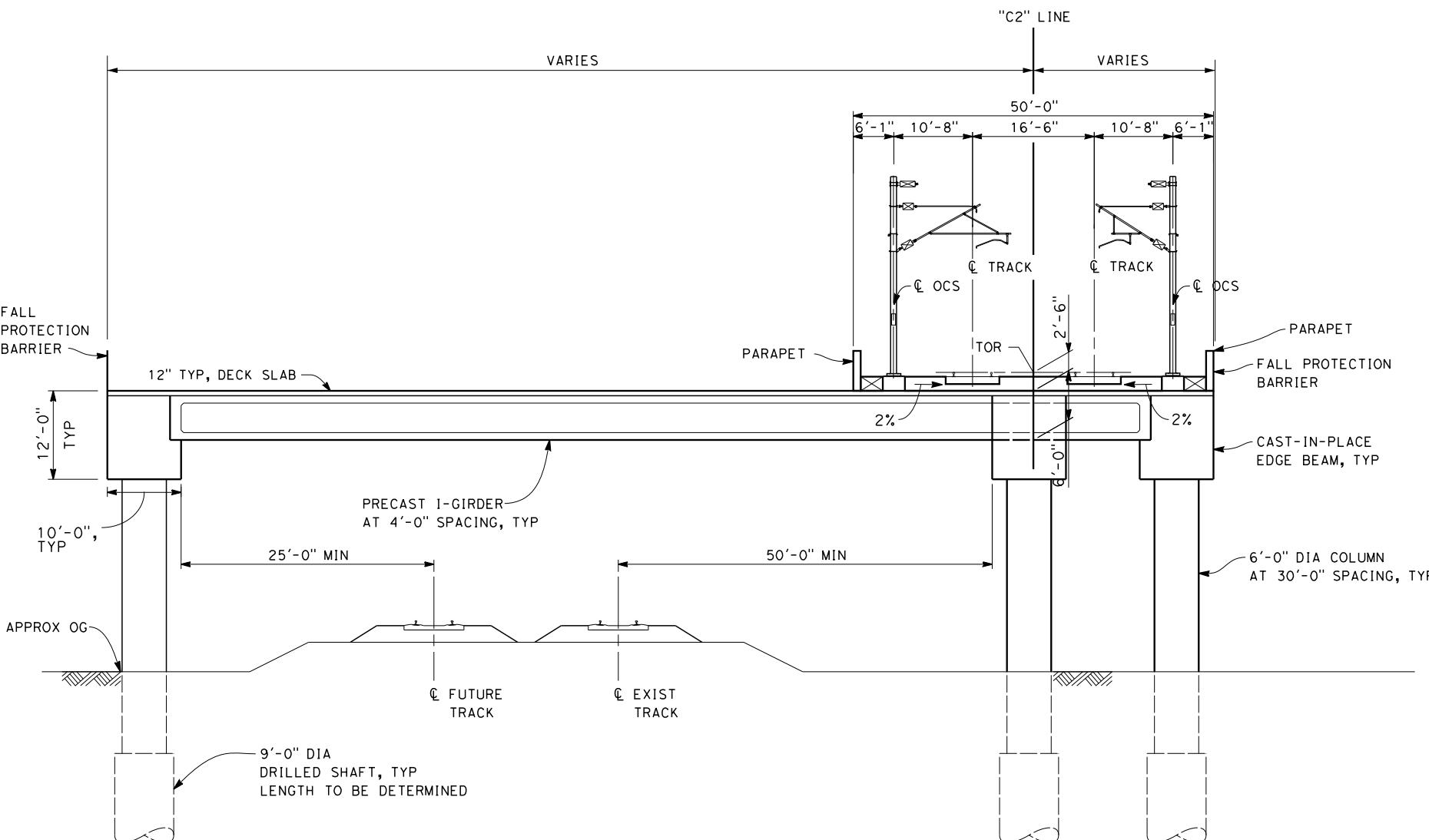
DESIGNED
Y. RE
DRAWN BY
F. PA
CHECKED
O. LI
IN CHARGE
R. CO
DATE
05

**PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
PLAN AND ELEVATION**

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J1095
SCALE
AS SHOWN
SHEET NO.



SECTION E

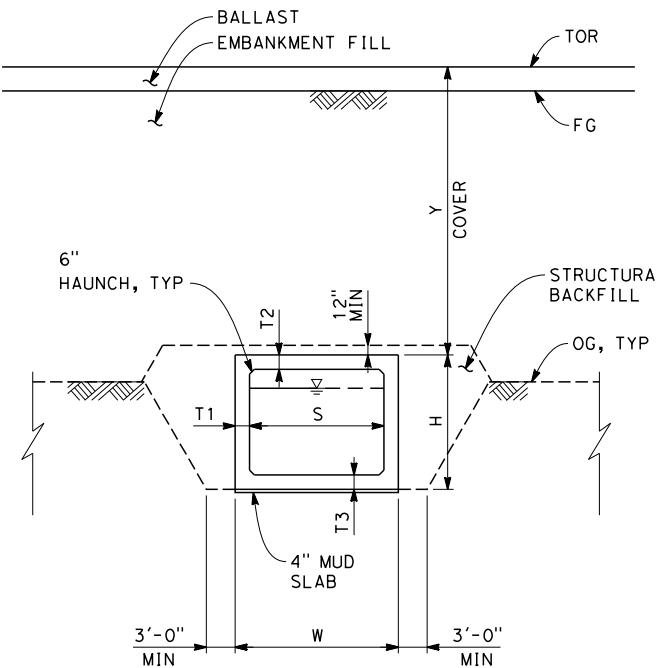
SCALE: 1" = 10'

STA 3024+75 THROUGH 3029+21.53



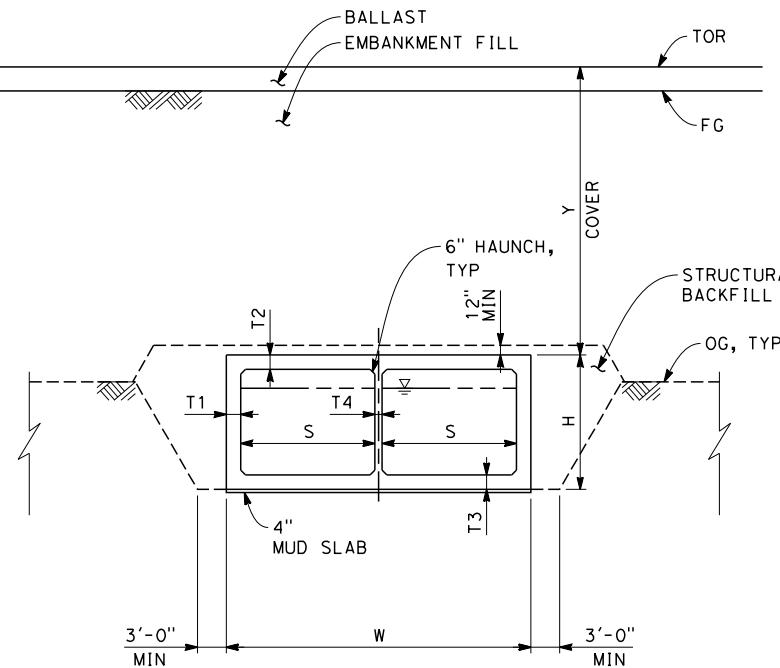
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN BYPASS SUBSECTION
ALIGNMENT C2
STATE ROUTE 43 BNSF VIADUCT
TYPICAL SECTIONS**

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J2002
SCALE
AS SHOWN
SHEET NO.



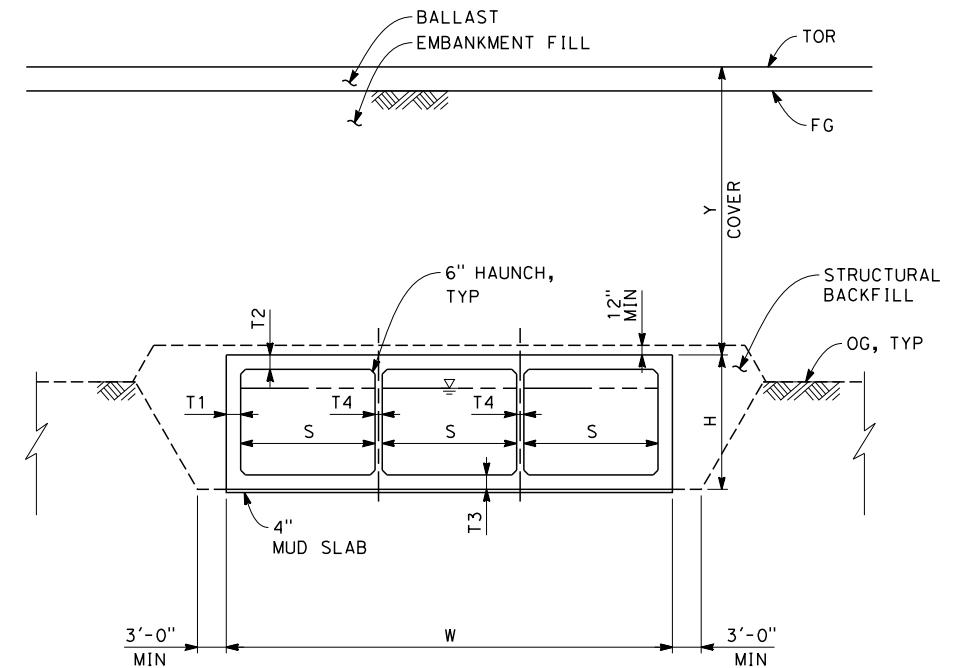
SINGLE CELL BOX CULVERT

SCALE: 1" = 10'



2-CELL BOX CULVERT

SCALE: 1" = 10'



3-CELL BOX CULVERT

SCALE: 1" = 10'

SINGLE-CELL BOX CULVERT

COVER	SPAN	HEIGHT	WIDTH	T1	T2	T3
6'- 0"	10'- 0"	5'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
6'- 0"	10'- 0"	10'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
6'- 0"	15'- 0"	5'- 0"	17'- 0"	1'- 0"	1'- 0"	1'- 0"
6'- 0"	15'- 0"	10'- 0"	17'- 0"	1'- 0"	1'- 0"	1'- 0"
10'- 0"	10'- 0"	5'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
10'- 0"	10'- 0"	10'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
10'- 0"	15'- 0"	5'- 0"	17'- 0"	1'- 0"	1'- 0"	1'- 0"
10'- 0"	15'- 0"	10'- 0"	17'- 0"	1'- 0"	1'- 0"	1'- 0"
15'- 0"	10'- 0"	5'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
15'- 0"	10'- 0"	10'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
15'- 0"	15'- 0"	5'- 0"	17'- 0"	1'- 0"	1'- 0"	1'- 0"
15'- 0"	15'- 0"	10'- 0"	17'- 0"	1'- 0"	1'- 0"	1'- 0"
20'- 0"	10'- 0"	5'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
20'- 0"	10'- 0"	10'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
20'- 0"	15'- 0"	5'- 0"	17'- 2"	1'- 1"	1'- 1"	1'- 1"
20'- 0"	15'- 0"	10'- 0"	17'- 2"	1'- 1"	1'- 1"	1'- 1"
25'- 0"	10'- 0"	5'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
25'- 0"	10'- 0"	10'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
25'- 0"	15'- 0"	5'- 0"	17'- 6"	1'- 3"	1'- 3"	1'- 3"
25'- 0"	15'- 0"	10'- 0"	17'- 6"	1'- 3"	1'- 3"	1'- 3"
30'- 0"	10'- 0"	5'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
30'- 0"	10'- 0"	10'- 0"	12'- 0"	1'- 0"	1'- 0"	1'- 0"
30'- 0"	15'- 0"	5'- 0"	17'- 8"	1'- 4"	1'- 4"	1'- 4"
30'- 0"	15'- 0"	10'- 0"	17'- 8"	1'- 4"	1'- 4"	1'- 4"

2-CELL BOX CULVERT

COVER	SPAN	HEIGHT	WIDTH	T1	T2	T3	T4
6'- 0"	10'- 0"	5'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
6'- 0"	10'- 0"	10'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
6'- 0"	15'- 0"	5'- 0"	32'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
6'- 0"	15'- 0"	10'- 0"	32'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
10'- 0"	10'- 0"	5'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
10'- 0"	10'- 0"	10'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
10'- 0"	15'- 0"	5'- 0"	32'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
10'- 0"	15'- 0"	10'- 0"	32'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
15'- 0"	10'- 0"	5'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
15'- 0"	10'- 0"	10'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
15'- 0"	15'- 0"	5'- 0"	32'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
15'- 0"	15'- 0"	10'- 0"	32'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
20'- 0"	10'- 0"	5'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
20'- 0"	10'- 0"	10'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
20'- 0"	15'- 0"	5'- 0"	33'- 0"	1'- 1"	1'- 1"	1'- 1"	0'-10"
20'- 0"	15'- 0"	10'- 0"	33'- 0"	1'- 1"	1'- 1"	1'- 1"	0'-10"
25'- 0"	10'- 0"	5'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
25'- 0"	10'- 0"	10'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
25'- 0"	15'- 0"	5'- 0"	33'- 6"	1'- 3"	1'- 3"	1'- 3"	1'- 0"
25'- 0"	15'- 0"	10'- 0"	33'- 6"	1'- 3"	1'- 3"	1'- 3"	1'- 0"
30'- 0"	10'- 0"	5'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
30'- 0"	10'- 0"	10'- 0"	22'-10"	1'- 0"	1'- 0"	1'- 0"	0'-10"
30'- 0"	15'- 0"	5'- 0"	33'- 9"	1'- 4"	1'- 4"	1'- 4"	1'- 1"
30'- 0"	15'- 0"	10'- 0"	33'- 9"	1'- 4"	1'- 4"	1'- 4"	1'- 1"

3-CELL BOX CULVERT

COVER	SPAN	HEIGHT	WIDTH	T1	T2	T3	T4
6'- 0"	10'- 0"	5'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
6'- 0"	10'- 0"	10'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
6'- 0"	15'- 0"	5'- 0"	48'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
6'- 0"	15'- 0"	10'- 0"	48'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
10'- 0"	10'- 0"	5'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
10'- 0"	10'- 0"	10'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
10'- 0"	15'- 0"	5'- 0"	48'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
10'- 0"	15'- 0"	10'- 0"	48'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
15'- 0"	10'- 0"	5'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
15'- 0"	10'- 0"	10'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
15'- 0"	15'- 0"	5'- 0"	48'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
15'- 0"	15'- 0"	10'- 0"	48'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
20'- 0"	10'- 0"	5'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
20'- 0"	10'- 0"	10'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
20'- 0"	15'- 0"	5'- 0"	48'-11"	1'- 1"	1'- 1"	1'- 1"	0'-10"
20'- 0"	15'- 0"	10'- 0"	48'-11"	1'- 1"	1'- 1"	1'- 1"	0'-10"
25'- 0"	10'- 0"	5'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
25'- 0"	10'- 0"	10'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
25'- 0"	15'- 0"	5'- 0"	49'- 6"	1'- 3"	1'- 3"	1'- 3"	1'- 0"
25'- 0"	15'- 0"	10'- 0"	49'- 6"	1'- 3"	1'- 3"	1'- 3"	1'- 0"
30'- 0"	10'- 0"	5'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
30'- 0"	10'- 0"	10'- 0"	33'- 7"	1'- 0"	1'- 0"	1'- 0"	0'-10"
30'- 0"	15'- 0"	5'- 0"	49'-10"	1'- 4"	1'- 4"	1'- 4"	1'- 1"
30'- 0"	15'- 0"	10'- 0"	49'-10"	1'- 4"	1'- 4"	1'- 4"	1'- 1"

NOTES:

1. ALL DIMENSIONS ARE IN U.S. CUSTOMARY UNITS.
2. WATER LEVEL SHOWN IS ASSUMED DESIGN FLOW LEVEL.
3. DESIGN ASSUMES THAT AREAS OF SOFT GROUND BELOW FOUNDATION ARE TREATED BEFORE CONSTRUCTION.
4. MINIMUM CLEARANCE FROM DESIGN FLOW LEVEL TO SOFFIT SHALL BE 2'-0".
5. MINIMUM DIMENSION "Y" FROM TOP OF RAIL TO TOP OF STRUCTURE SHALL BE 6'-0".



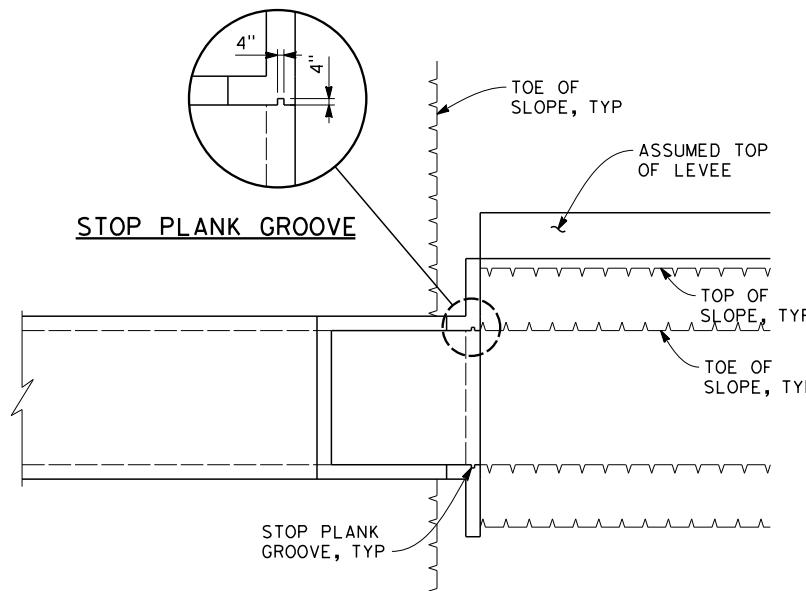
DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRO
IN CHARGE
R. COFFIN
DATE
05/30/1



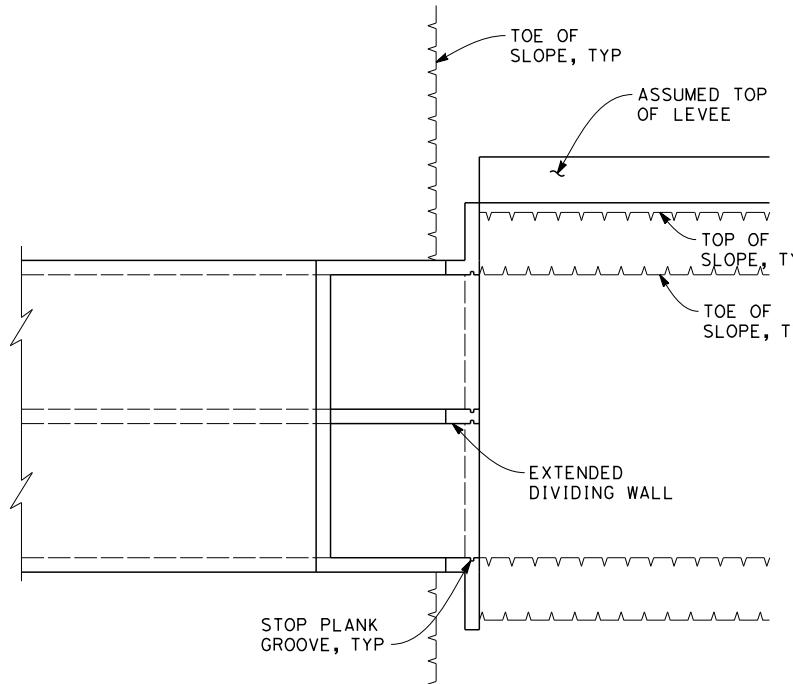
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

**BOX CULVERT
TYPICAL DETAILS
SHEET 1**

CONTRACT NO.
HSL 06-0003
DRAWING NO.
ST-J5001
SCALE
AS SHOWN
SHEET NO.



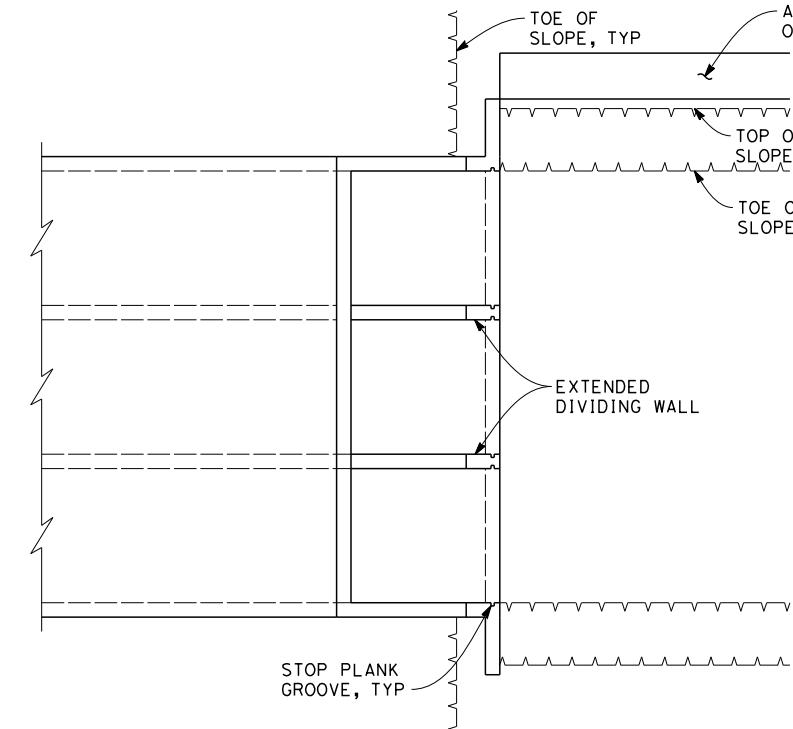
SINGLE CELL CULVERT



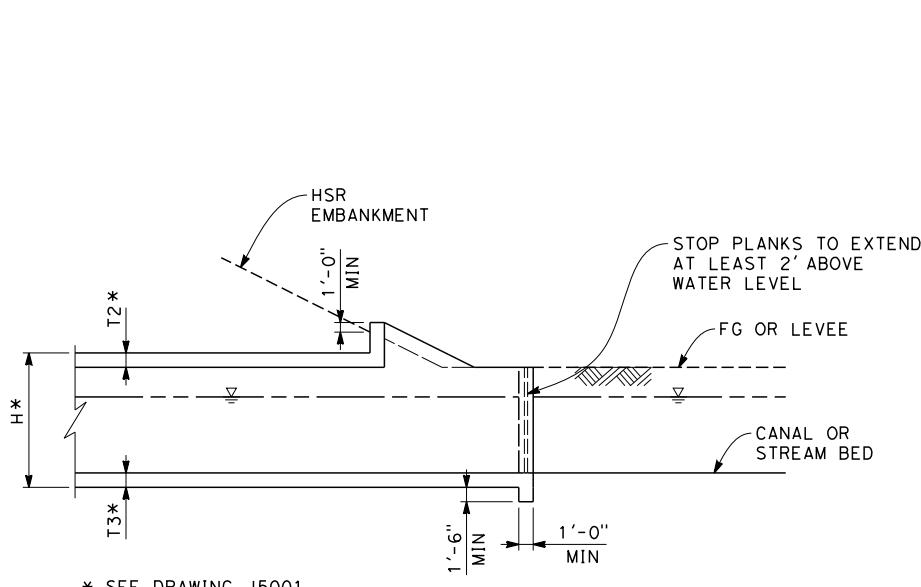
2-CELL CULVERT

PLAN

SCALE: 1" = 10'

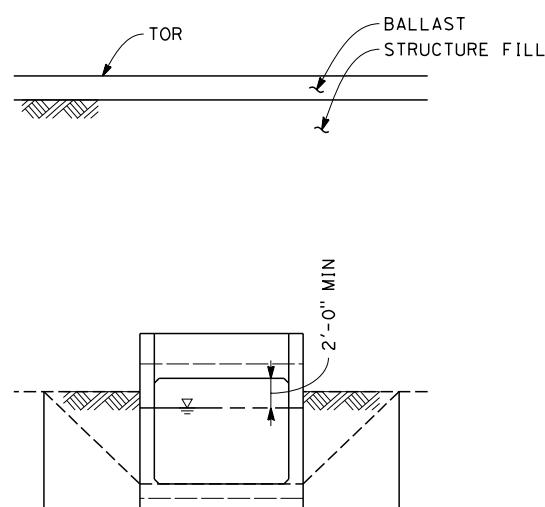


3-CELL CULVERT



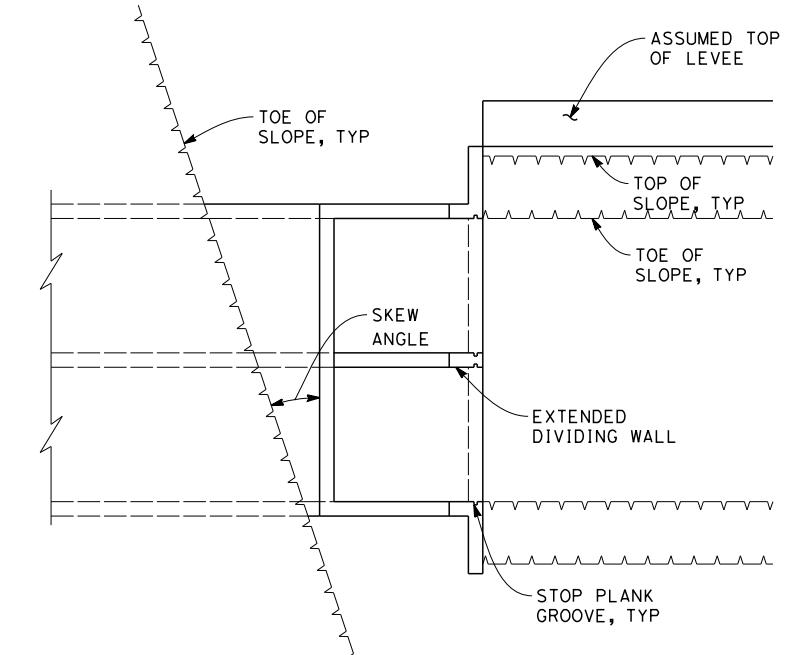
ELEVATION

SCALE: 1" = 10'



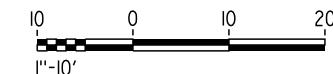
TYPICAL SECTION

SCALE: 1" = 10'



TREATMENT OF SKEWED CROSSING

SCALE: 1" = 10'



REV	DATE	BY	CHK	APP	DESCRIPTION
					05/30/14

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION

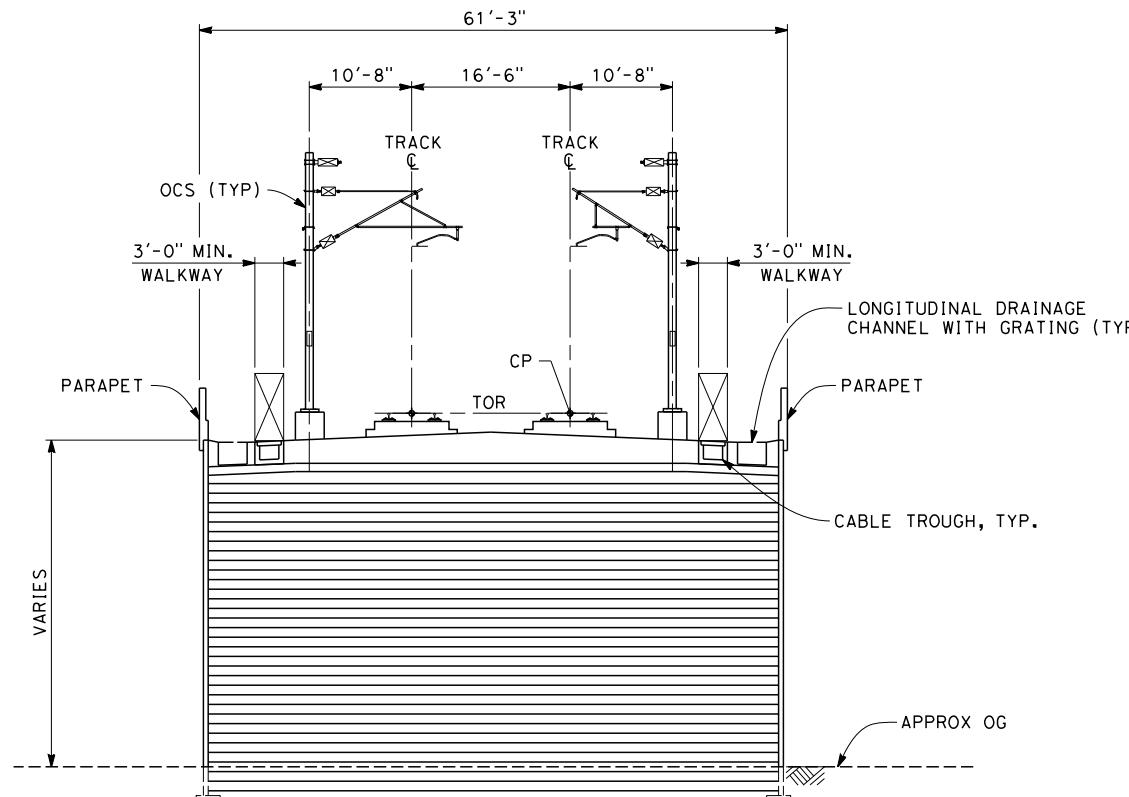


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BOX CULVERT
TYPICAL DETAILS
SHEET 2

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J5002
SCALE
AS SHOWN
SHEET NO.

NOTES:

GROUND IMPROVEMENT OR PILED RAFT FOUNDATION MAY BE NECESSARY IN SOME LOCATIONS TO PROVIDE SUITABLE SUPPORT FOR THE RETAINED EMBANKMENT, REFER TO THE GROUND INVESTIGATION DATA REPORT.



STRUCTURE FORM	LENGTH	BEGIN STA	END STA	CONSTRUCTION	RETAINED HEIGHT AT BEGINNING	RETAINED HEIGHT AT END
RETAINING WALL	1970	1086+00.0	1105+70.0	MSE WALL (RETAINED EMBANKMENT)	15' APPROX	30' APPROX
RETAINING WALL	1730	1156+20.0	1173+50.0	MSE WALL (RETAINED EMBANKMENT)	30' APPROX	15' APPROX
RETAINING WALL	2439	1439+19.0	1463+58.0	MSE WALL (RETAINED EMBANKMENT)	15' APPROX	30' APPROX
RETAINING WALL	2599	1596+51.0	1622+50.0	MSE WALL (RETAINED EMBANKMENT)	30' APPROX	15' APPROX
RETAINING WALL	1817	1885+40.0	1903+57.0	MSE WALL (RETAINED EMBANKMENT)	15' APPROX	30' APPROX
RETAINING WALL	1511	2008+37.0	2023+48.0	MSE WALL (RETAINED EMBANKMENT)	30' APPROX	15' APPROX
RETAINING WALL	1081	2436+00.0	2446+81.0	MSE WALL (RETAINED EMBANKMENT)	15' APPROX	30' APPROX
RETAINING WALL	4492	2538+71.0	2583+63.0	MSE WALL (RETAINED EMBANKMENT)	30' APPROX	15' APPROX
RETAINING WALL	2286	2966+50.0	2989+36.0	MSE WALL (RETAINED EMBANKMENT)	15' APPROX	30' APPROX
RETAINING WALL	1868	3046+02.0	3064+70.0	MSE WALL (RETAINED EMBANKMENT)	30' APPROX	15' APPROX
RETAINING WALL	2305	3982+20.0	4005+25.0	MSE WALL (RETAINED EMBANKMENT)	15' APPROX	30' APPROX
RETAINING WALL	1830	4067+65.0	4085+95.0	MSE WALL (RETAINED EMBANKMENT)	30' APPROX	15' APPROX

TYPICAL SECTION

SCALE: 1" = 10'

0 0 10 20
1"-10'

\$FILE\$

\$PLTDRV\$

\$PNTBL\$

\$TIME\$

\$USER\$

\$DATE\$

REV

DATE

BY

CHK

APP

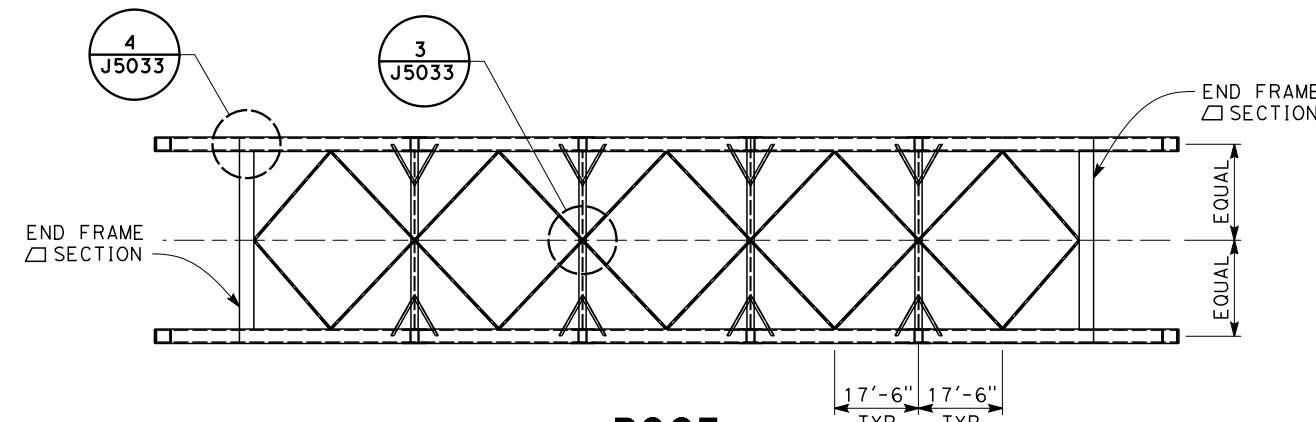
DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION



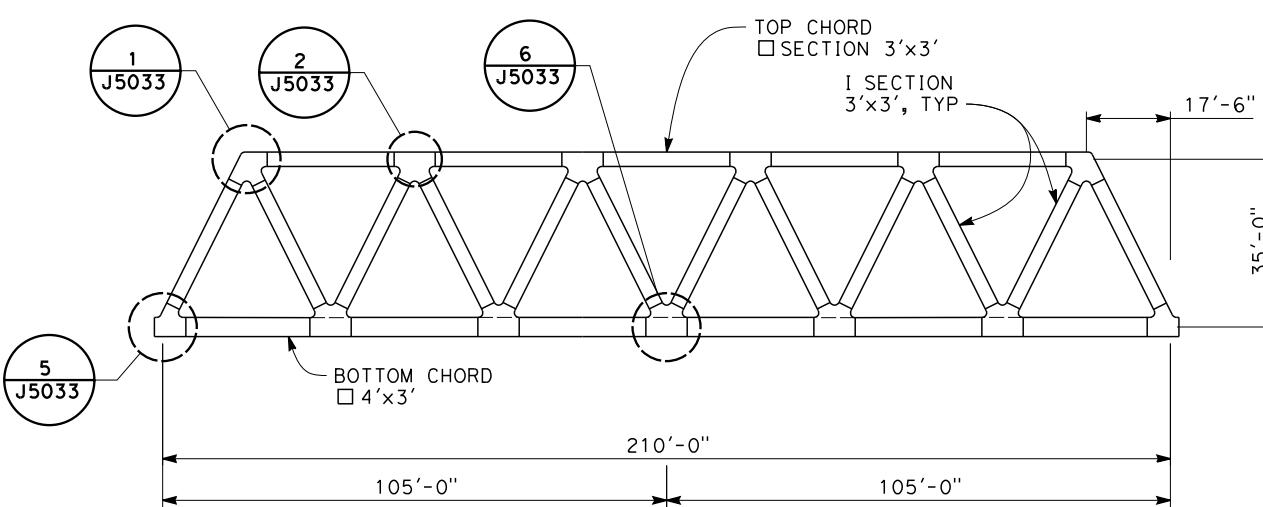
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
RETAINED EMBANKMENT
TYPICAL RETAINING WALL

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J5010
SCALE
AS SHOWN
SHEET NO.



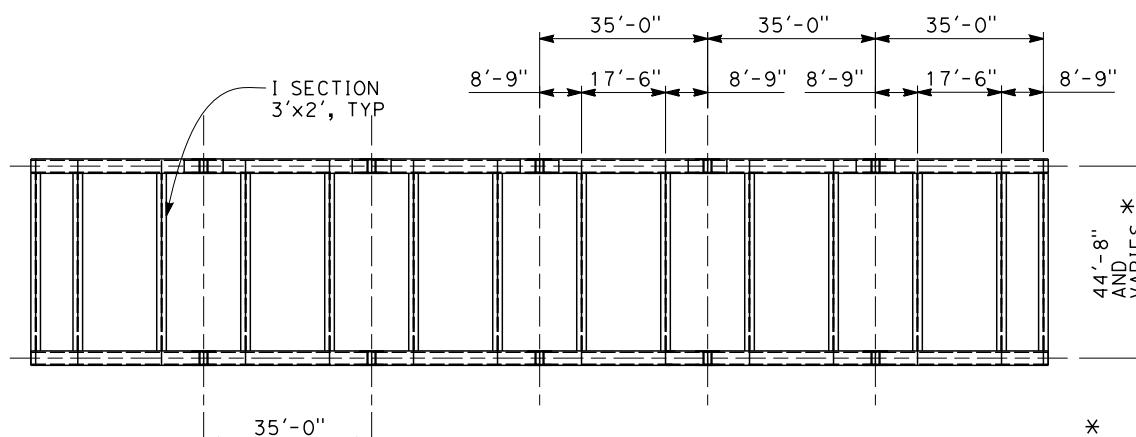
ROOF
SCALE: 1" = 20'

SCALE: 1" = 20'



ELEVATION
SCALE: 1" = 20'

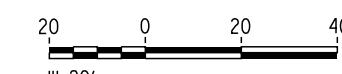
ELEVATION
SCALE: 1" = 20'



DECK

SCALE: 1" = 20'

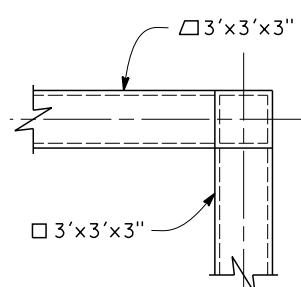
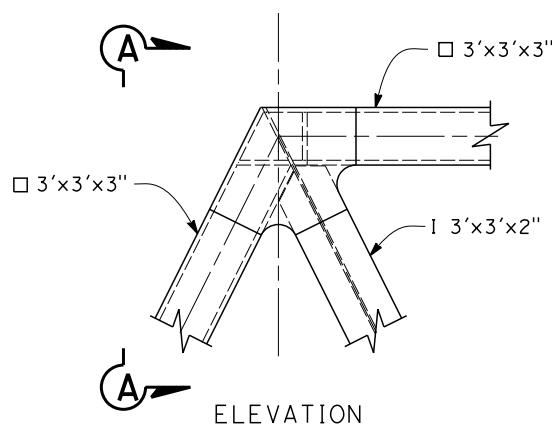
* 44'-3" MIN AT
H - KINGS RIVER VIADUCT
K4 - STATE ROUTE 43 UNDERPASS



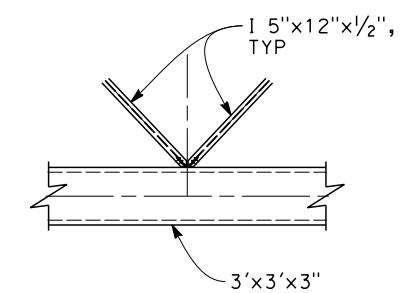
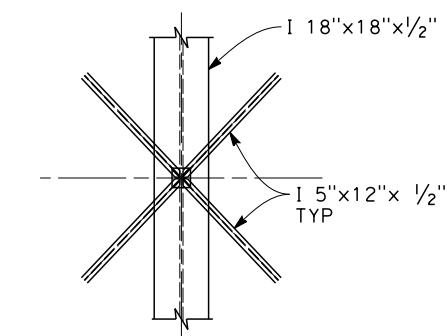
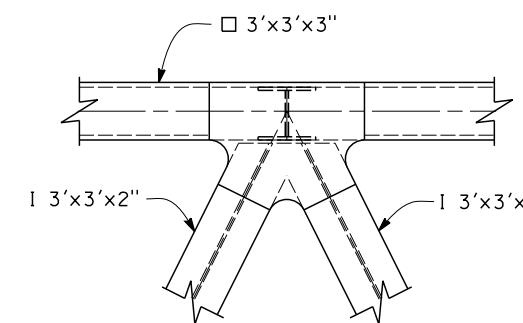
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD

210'-0" STEEL TRUSS
SECTIONS AND LAYOUT
GENERAL ARRANGEMENT

\$DATE\$						DESIGNED BY Y. REN DRAWN BY F. PALERMO CHECKED BY O. LIU IN CHARGE R. COFFIN DATE 05/30/14		FILED	P. 10		
					PROPOSED PRELIMINARY DESIGN NOT FOR CONSTRUCTION						
\$USER\$	REV	DATE	BY	CHK	APP	DESCRIPTION		 		CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CONTRACT NO. HSR 06-0003 DRAWING NO. ST-J5022 SCALE AS SHOWN SHEET NO.



SECTION A-A

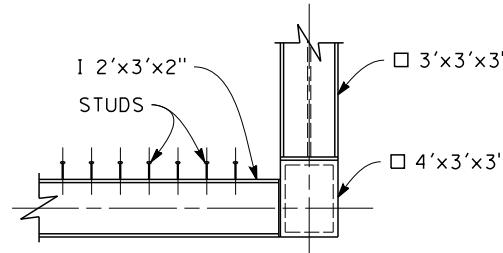
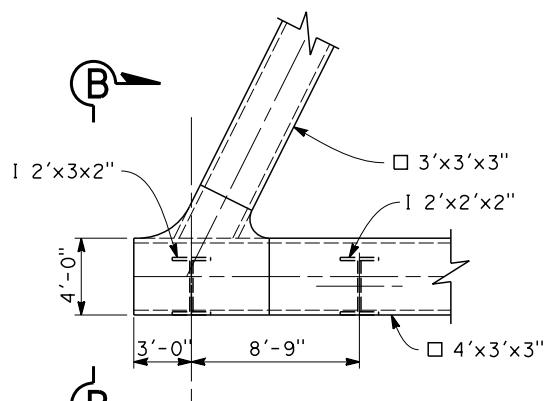


DETAIL 1
SCALE: 1" = 5'

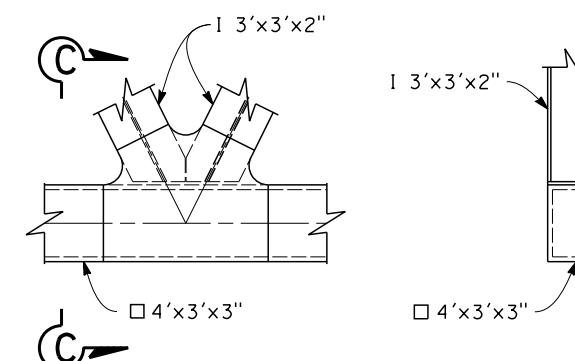
DETAIL 2
SCALE: 1" = 5'

DETAIL 3
SCALE: 1" = 5'

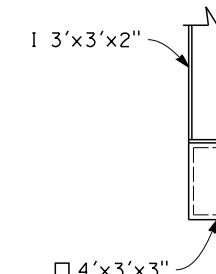
DETAIL 4
SCALE: 1" = 5'



ELEVATION



ELEVATION



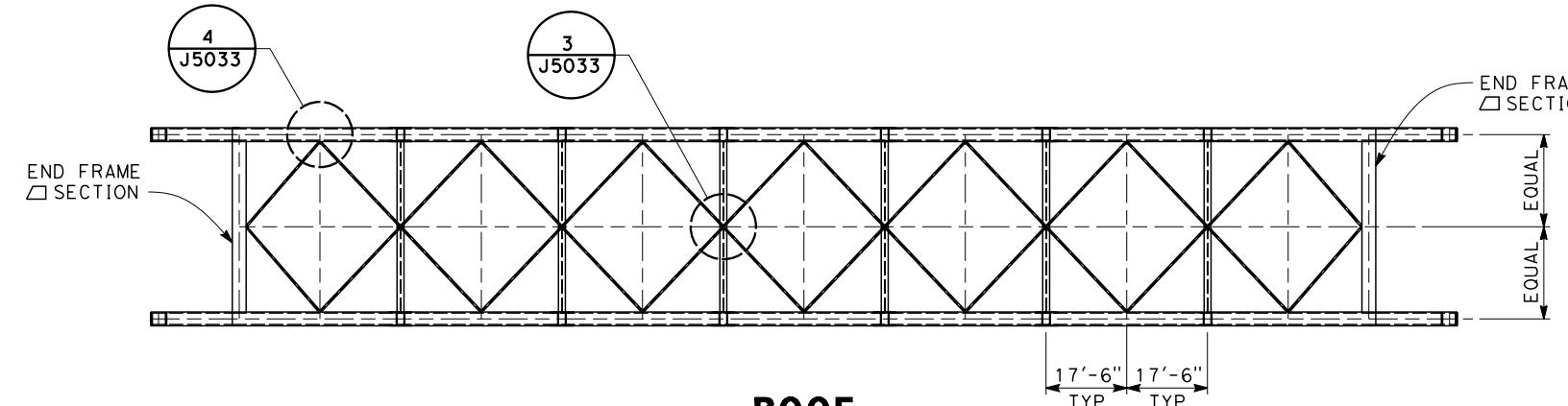
SECTION C-C

DETAIL 5
SCALE: 1" = 5'

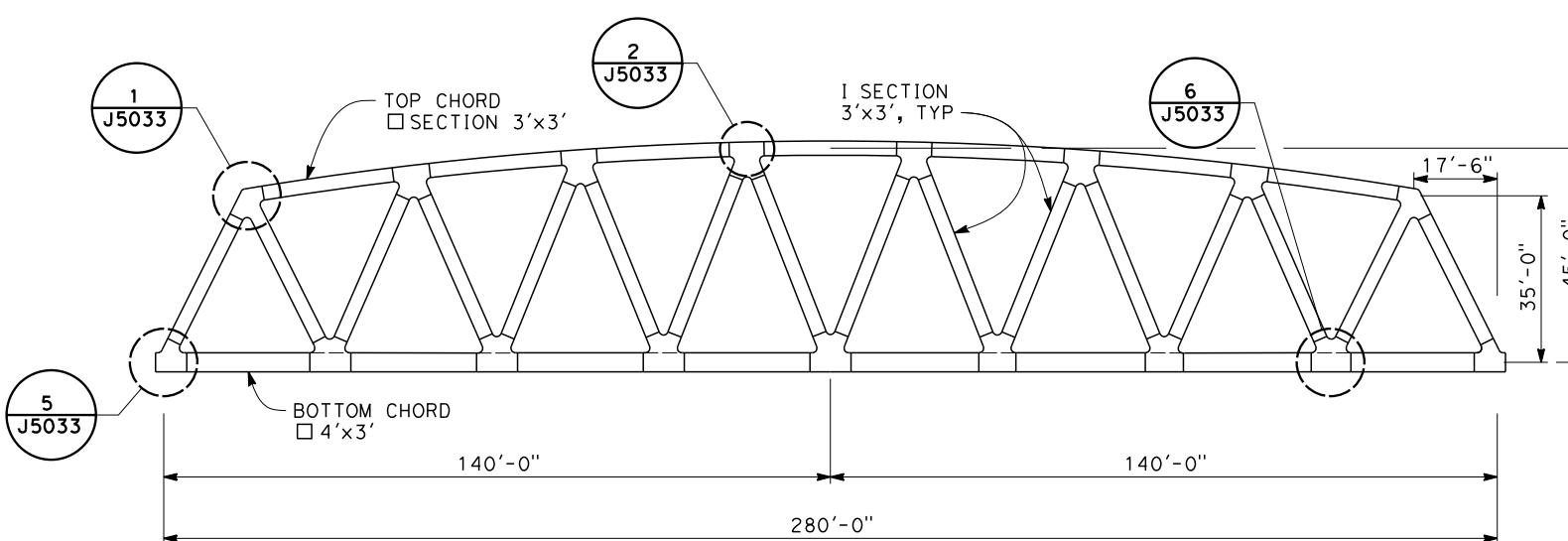
DETAIL 6
SCALE: 1" = 5'

\$FILE\$
\$PLTDRV\$
\$PNTBLSS\$
\$TIME\$
\$USER\$

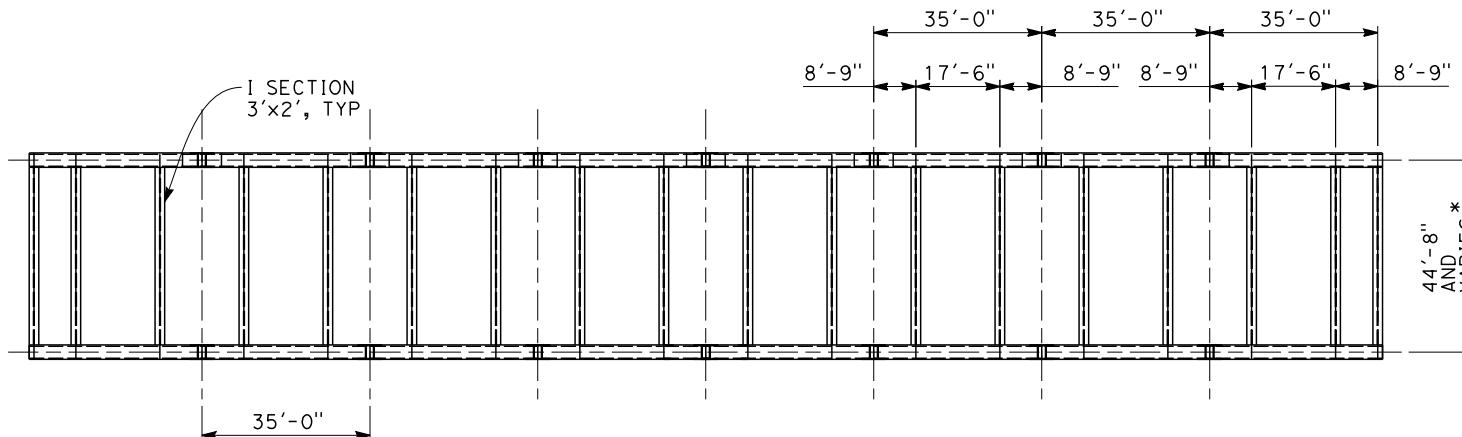
					DESIGNED BY Y. REN DRAWN BY F. PALERMO CHECKED BY O. LIU IN CHARGE R. COFFIN DATE 05/30/14	PROPOSED PRELIMINARY DESIGN NOT FOR CONSTRUCTION	URS HMM ARUP CALIFORNIA HIGH-SPEED TRAIN	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD PACKAGE 2-3 210'-0" STEEL TRUSS DETAILS	CONTRACT NO. HSR 06-0003 DRAWING NO. ST-J5023 SCALE AS SHOWN SHEET NO.	
REV	DATE	BY	CHK	APP	DESCRIPTION	05/30/14				



ROOF
SCALE: 1" = 20'



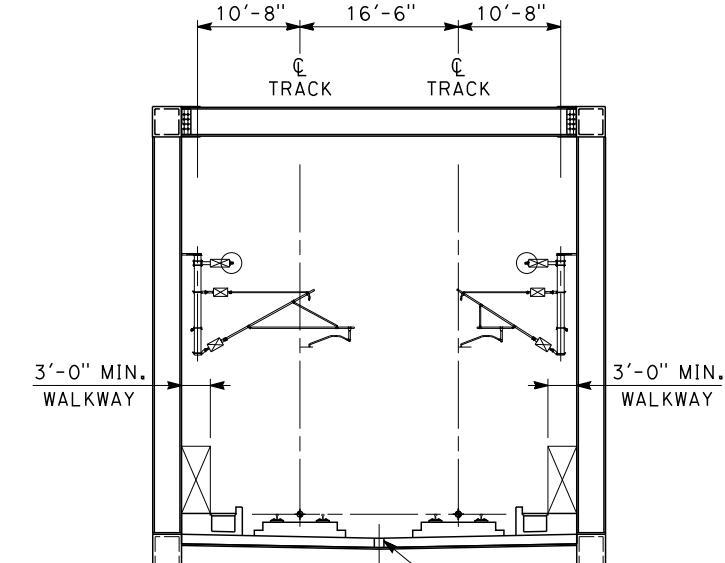
ELEVATION
SCALE: 1" = 20'



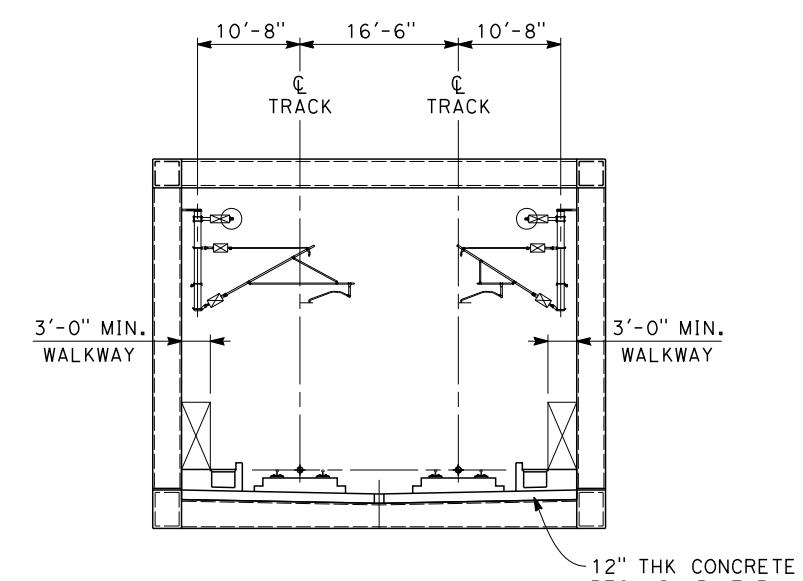
DECK
SCALE: 1" = 20'

* 44'-6" MIN AT H - KINGS RIVER VIADUCT (AT LEVEE ROAD BRIDGE)
44'-3" MIN AT K4 - STATE ROUTE 43 UNDERPASS

20 0 20 40
1"=20'



MID-SPAN
SCALE: 1" = 10'



END
SCALE: 1" = 10'

10 0 10 20
1"=10'

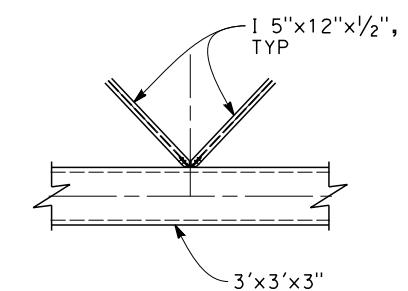
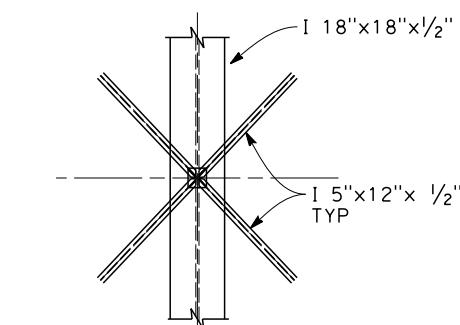
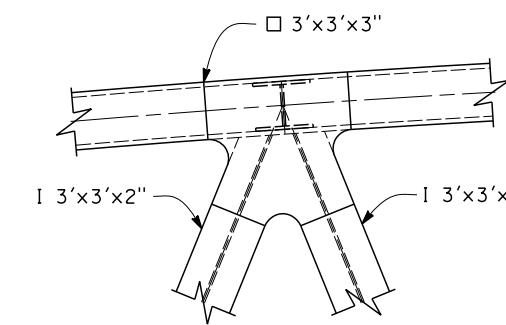
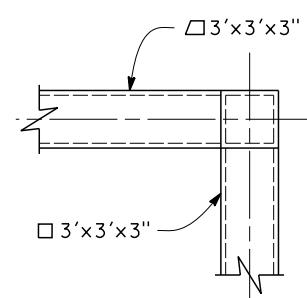
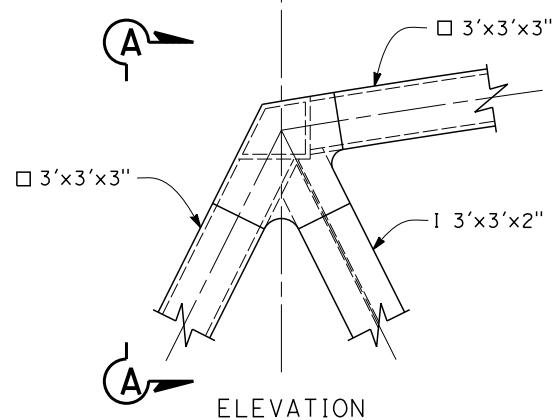
USER\$	DATE	REV	BY	CHK	APP	DESCRIPTION

DESIGNED BY Y. REN	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION	CALIFORNIA HIGH-SPEED RAIL AUTHORITY
CHECKED BY O. LIU		
IN CHARGE R. COFFIN		
DATE 05/30/14		

05/30/14

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
PACKAGE 2-3
280'-0" STEEL TRUSS
SECTIONS AND LAYOUT
GENERAL ARRANGEMENT

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J5024
SCALE
AS SHOWN
SHEET NO.



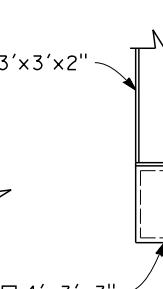
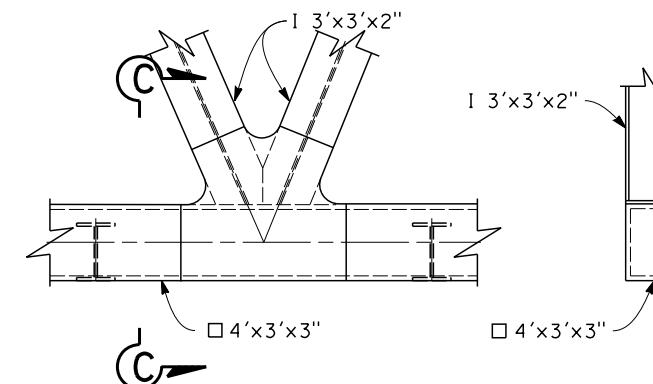
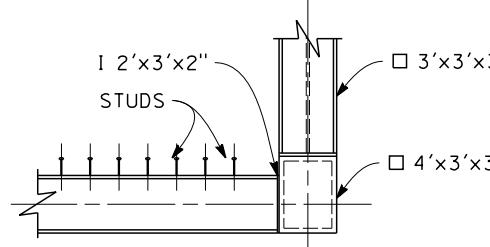
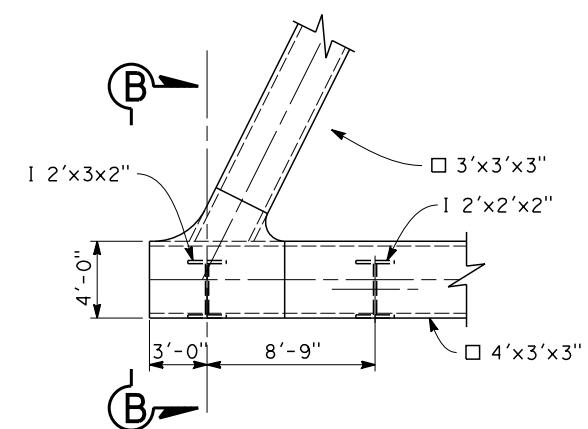
DETAIL 1
SCALE: 1" = 5'

DETAIL 2
SCALE: 1" = 5'

DETAIL 3
SCALE: 1" = 5'

DETAIL 4
SCALE: 1" = 5'

\$FILE\$



DETAIL 5
SCALE: 1" = 5'

DETAIL 6
SCALE: 1" = 5'

USER\$	DATE	BY	CHK	APP	DESCRIPTION
					05/30/14

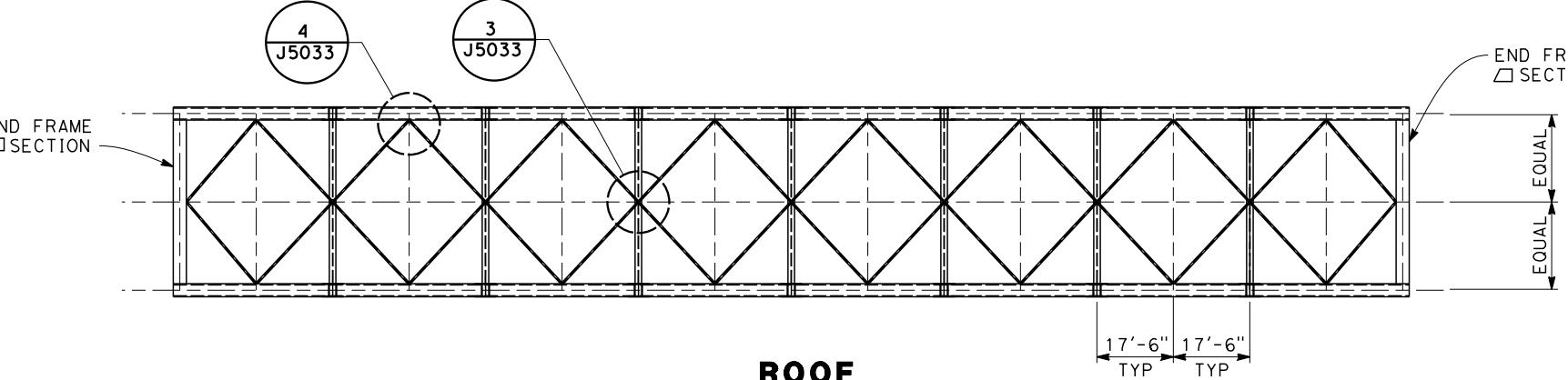
DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION

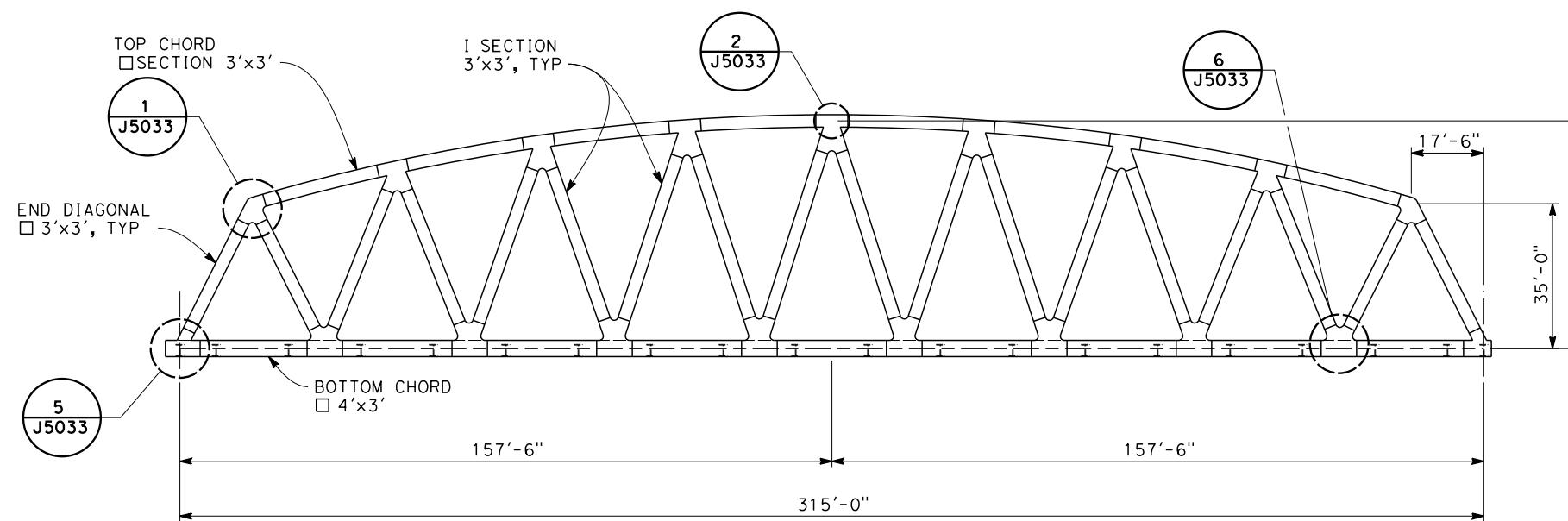


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
PACKAGE 2-3
280'-0" STEEL TRUSS
DETAILS

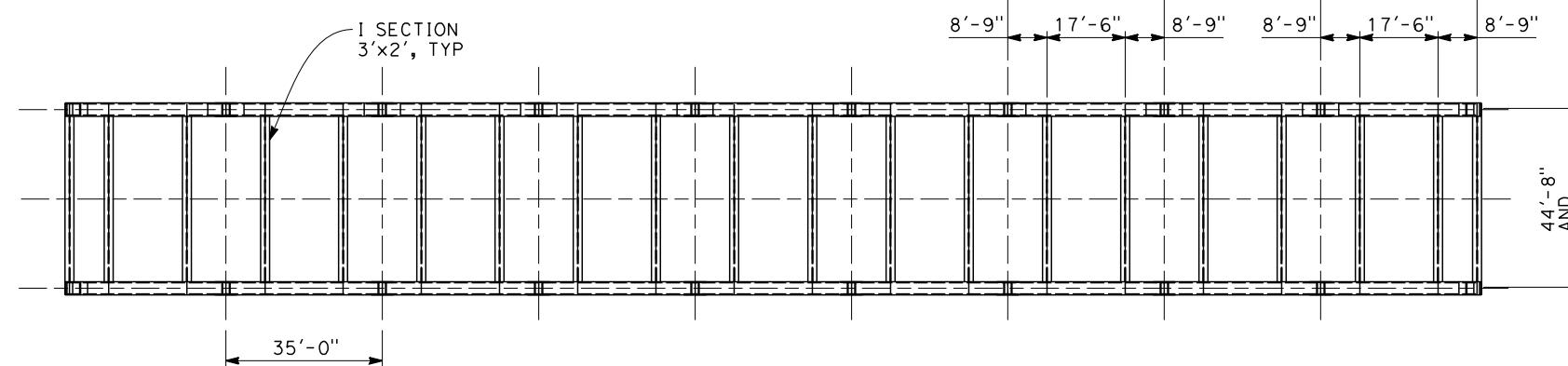
CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J5025
SCALE
AS SHOWN
SHEET NO.



ROOF
SCALE: 1" = 20'

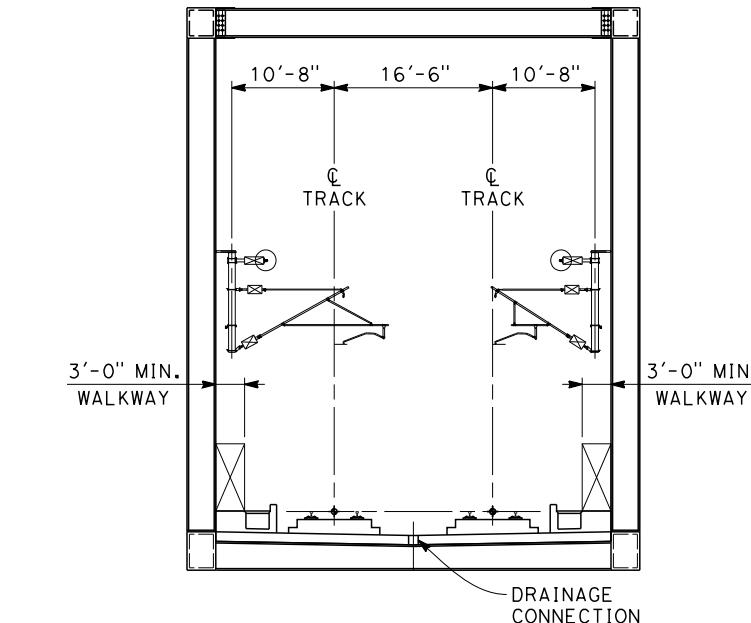
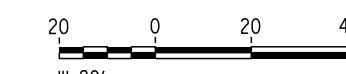


ELEVATION
SCALE: 1" = 20'

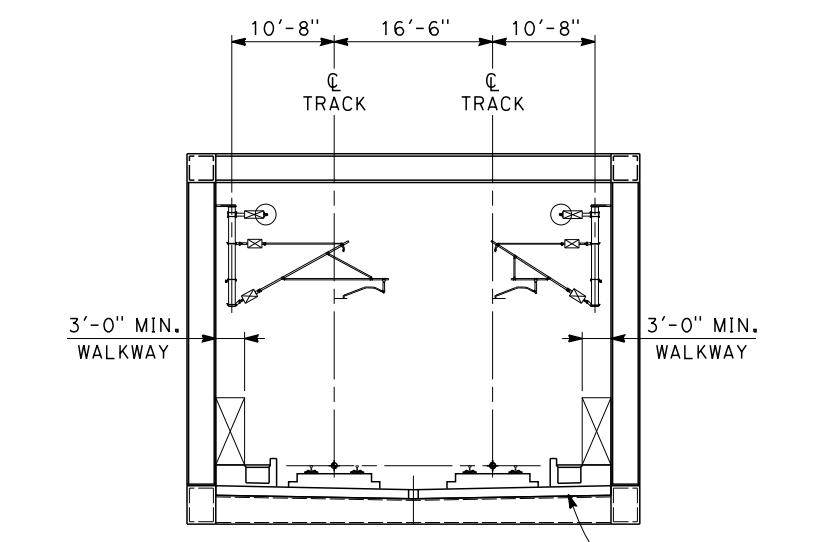


DECK
SCALE: 1" = 20'

* 44'-7" MIN AT H - KINGS RIVER VIADUCT (AT KINGS RIVER BRIDGE)
44'-8" MIN AT K4 - CROSS CREEK VIADUCT (AT CROSS CREEK BRIDGE)



MID-SPAN
SCALE: 1" = 10'



END
SCALE: 1" = 10'



\$FILE\$

\$PLTDRV\$

\$PNTBL\$

\$TIME\$

\$DATE\$

\$USER\$

REV DATE BY CHK APP DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
05/30/14

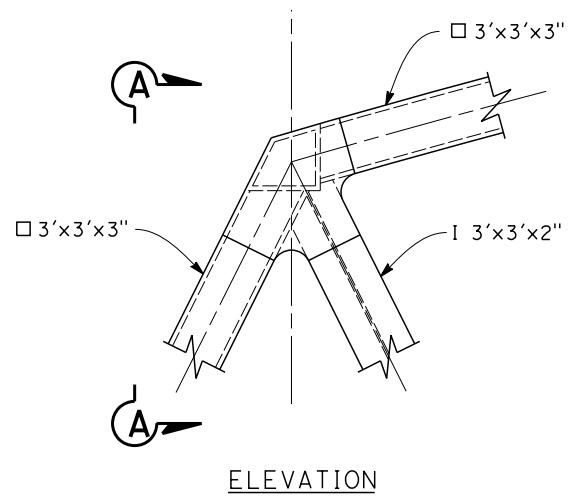
PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION



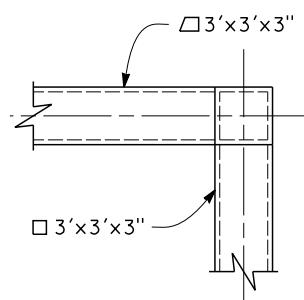
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD

PACKAGE 2-3
315'-0" STEEL TRUSS
SECTIONS AND LAYOUT
GENERAL ARRANGEMENT

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J5032
SCALE
AS SHOWN
SHEET NO.

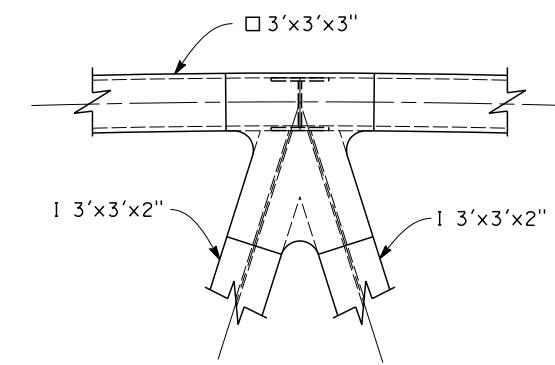


ELEVATION

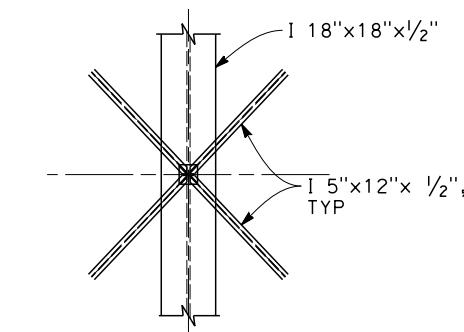


SECTION A-A

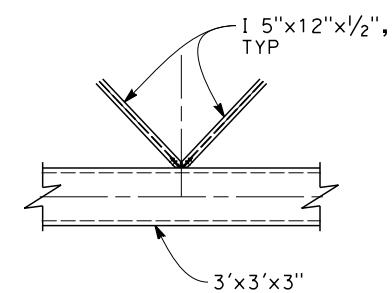
DETAIL 1
SCALE: 1" = 5'



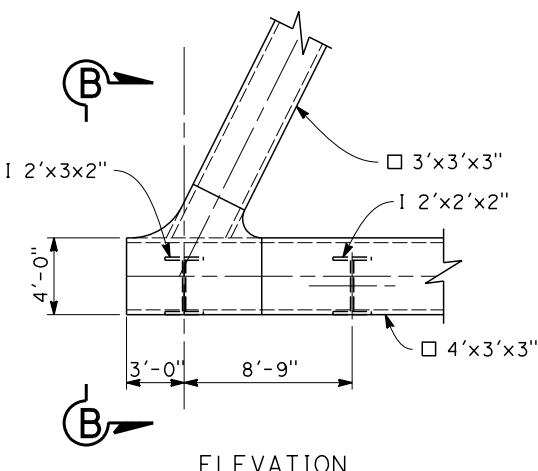
DETAIL 2
SCALE: 1" = 5'



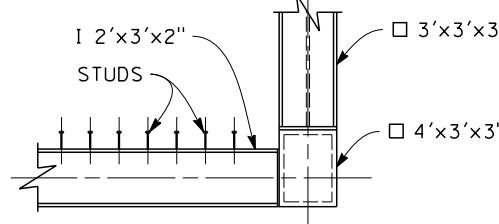
DETAIL 3
SCALE: 1" = 5'



DETAIL 4
SCALE: 1" = 5'

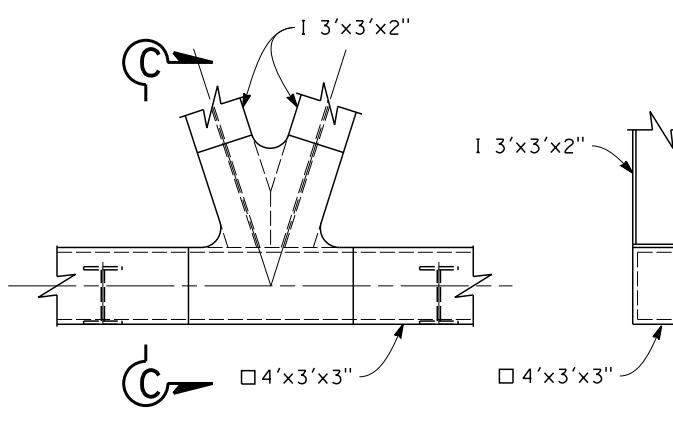


ELEVATION



SECTION B-B

DETAIL 5
SCALE: 1" = 5'



ELEVATION

SECTION C-C

DETAIL 6
SCALE: 1" = 5'



REV	DATE	BY	CHK	APP	DESCRIPTION

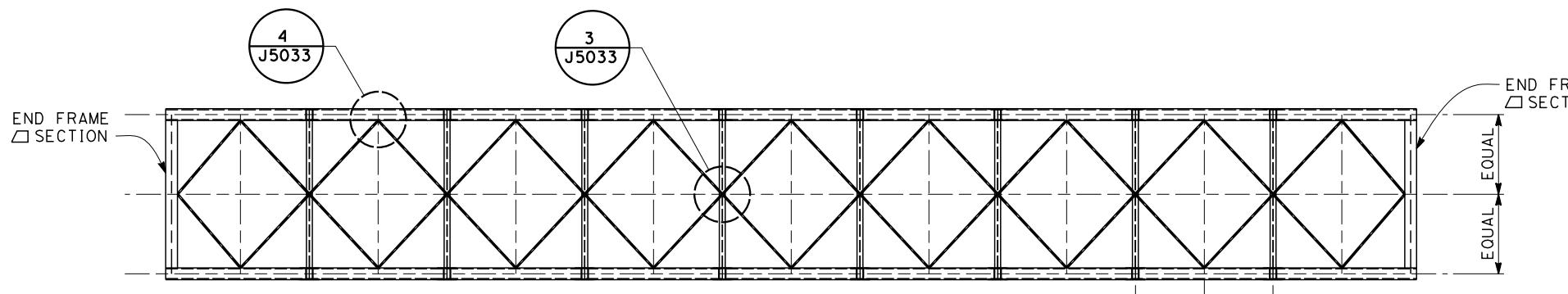
DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION

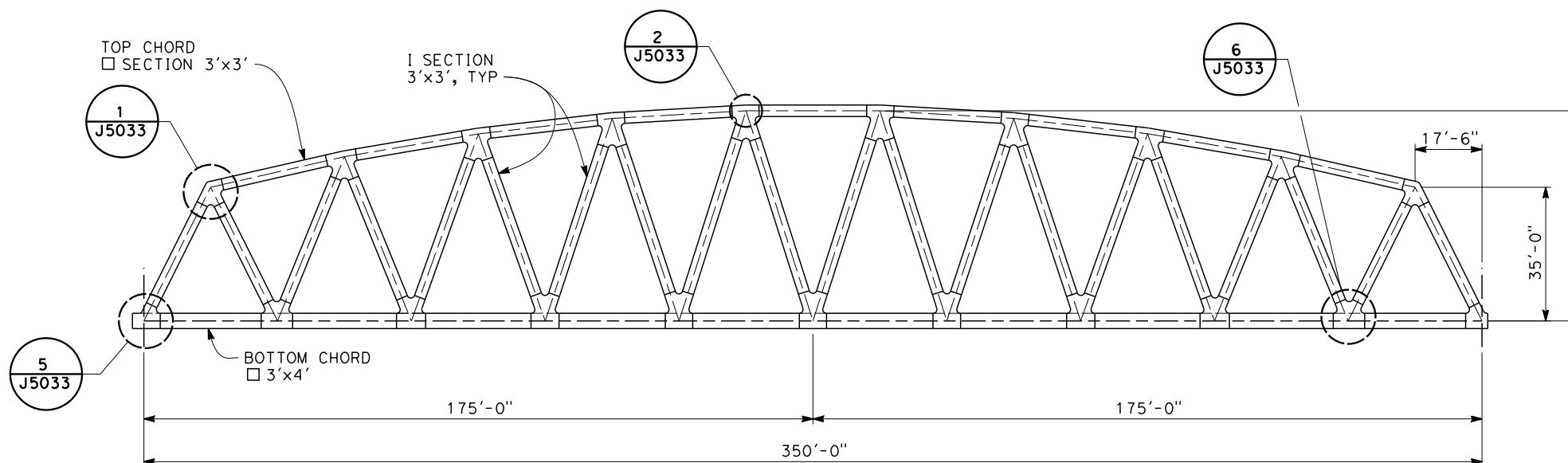


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
PACKAGE 2-3
315'-0" STEEL TRUSS
DETAILS

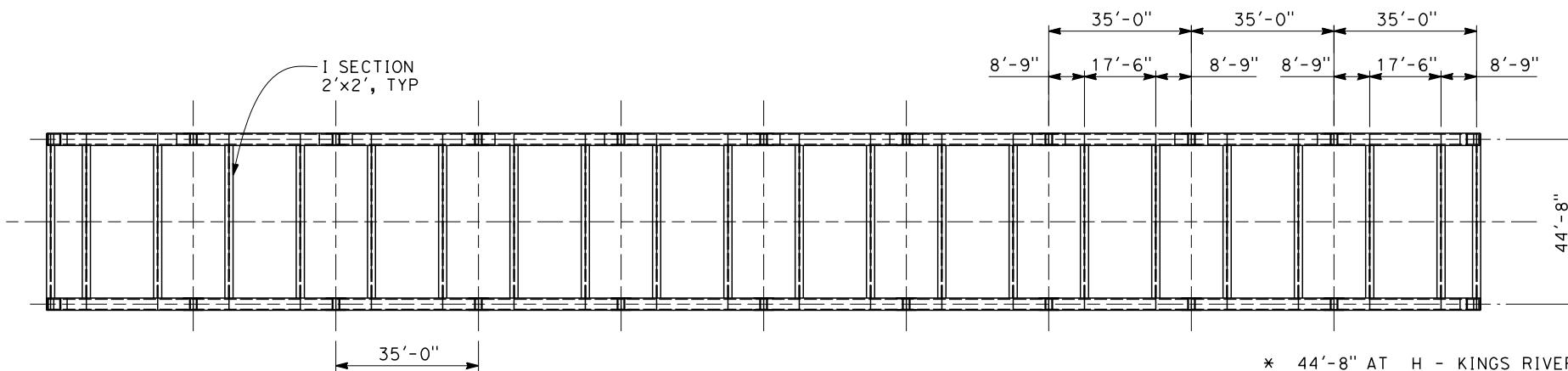
CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J5033
SCALE
AS SHOWN
SHEET NO.



ROOF
SCALE: 1" = 20'



ELEVATION
SCALE: 1" = 20'



DECK

* 44'-8" AT H - KINGS RIVER VIADUCT (AT DUTCH JOHN BRIDGE)
44'-8" AT H - KINGS RIVER VIADUCT (AT COLE SLOUGH BRIDGE)

REV	DATE	BY
		CHK

DESCRIPTION

DESIGNED BY M. FISHE
DRAWN BY F. PALER
CHECKED BY A. ARMST
IN CHARGE R. COFFI
DATE 05/30

R
MO
STRONG
N
D/14

**PROPOSED
PRELIMINARY
DESIGN**

**NOT FOR
CONSTRUCTION**

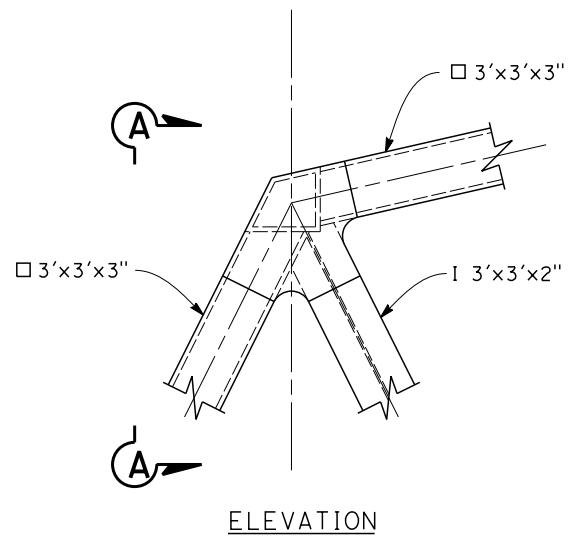


CALIFORNIA HIGH-SPEED RAIL AUTHORITY

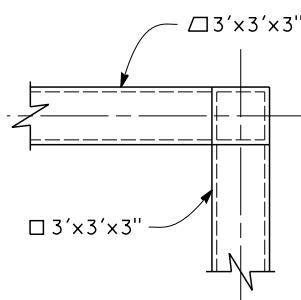
CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD

350'-0" STEEL TRUSS
SECTIONS AND LAYOUT
GENERAL ARRANGEMENT

CONTRACT NO.	HSR 06-0003
DRAWING NO.	ST-J5034
SCALE	AS SHOWN
SHEET NO.	



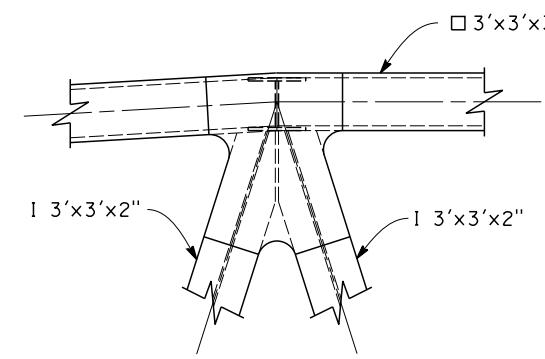
ELEVATION



SECTION A-A

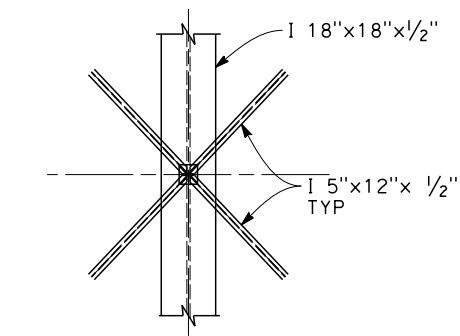
DETAIL 1

SCALE: 1" = 5'



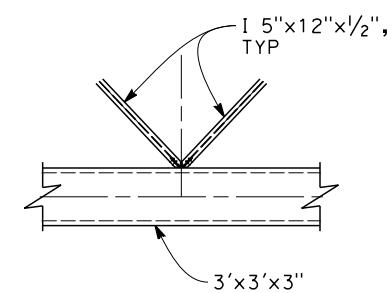
DETAIL 2

SCALE: 1" = 5'



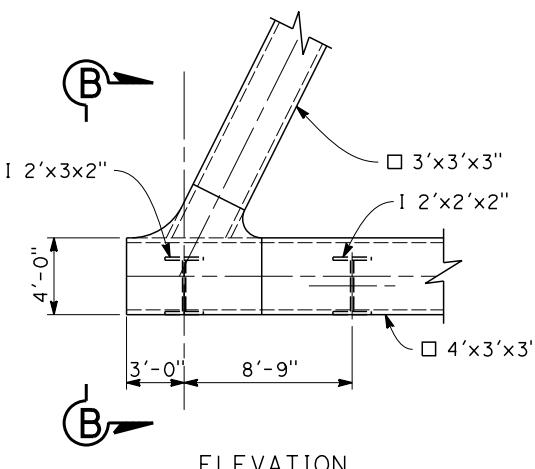
DETAIL 3

SCALE: 1" = 5'

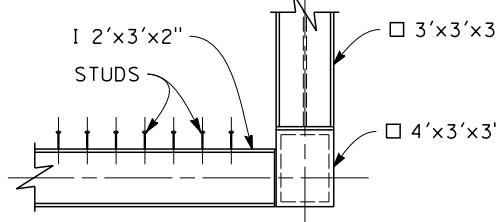


DETAIL 4

SCALE: 1" = 5'



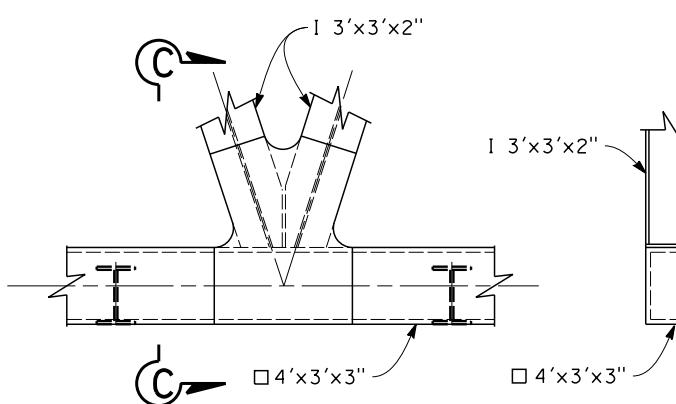
ELEVATION



SECTION B-B

DETAIL 5

SCALE: 1" = 5'



ELEVATION

SECTION C-C

DETAIL 6

SCALE: 1" = 5'



USER	DATE	BY	CHK	APP	DESCRIPTION

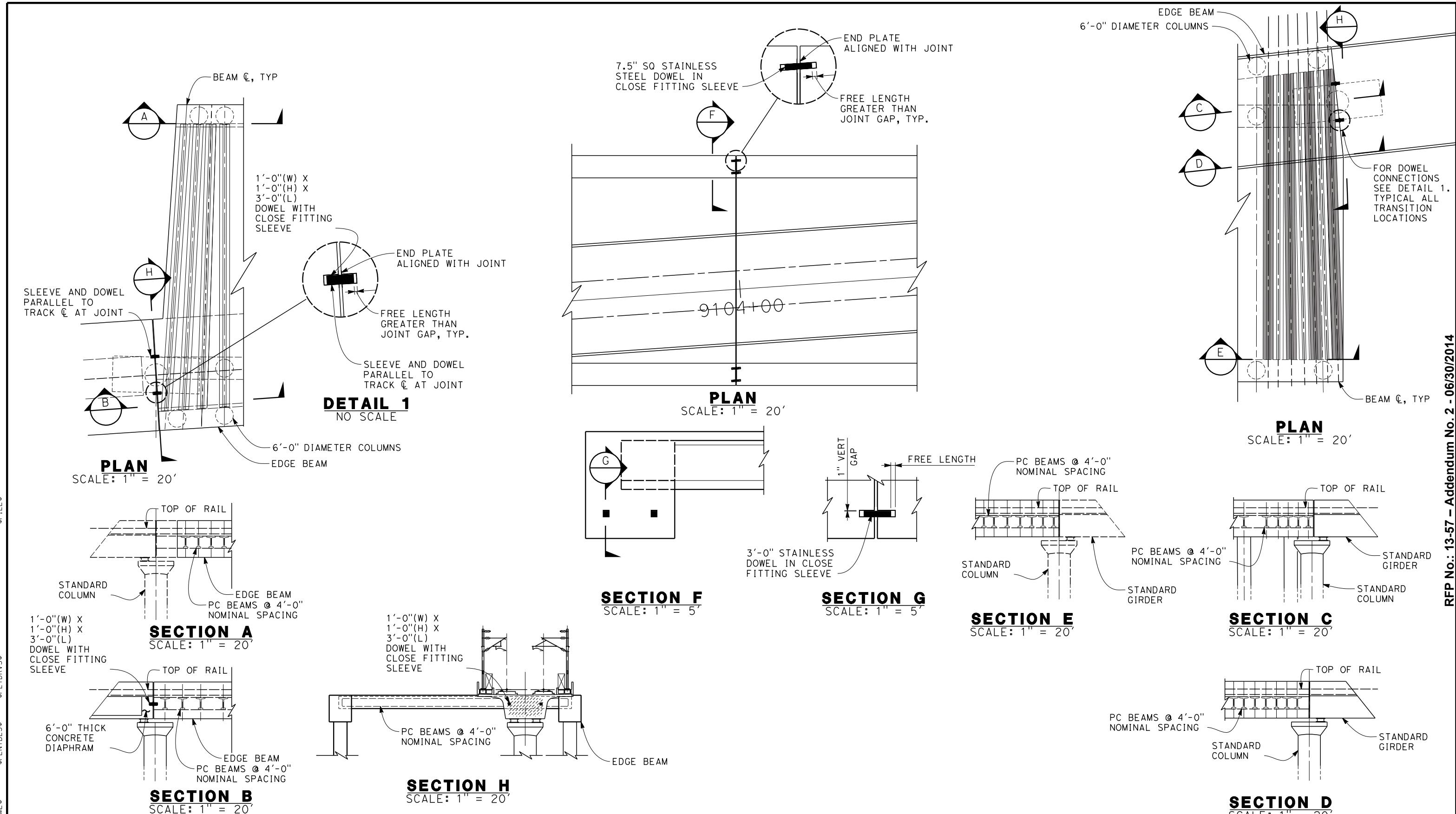
DESIGNED BY
M. FISHER
DRAWN BY
F. PALERMO
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
05/30/14

PROPOSED
PRELIMINARY
DESIGN
NOT FOR
CONSTRUCTION

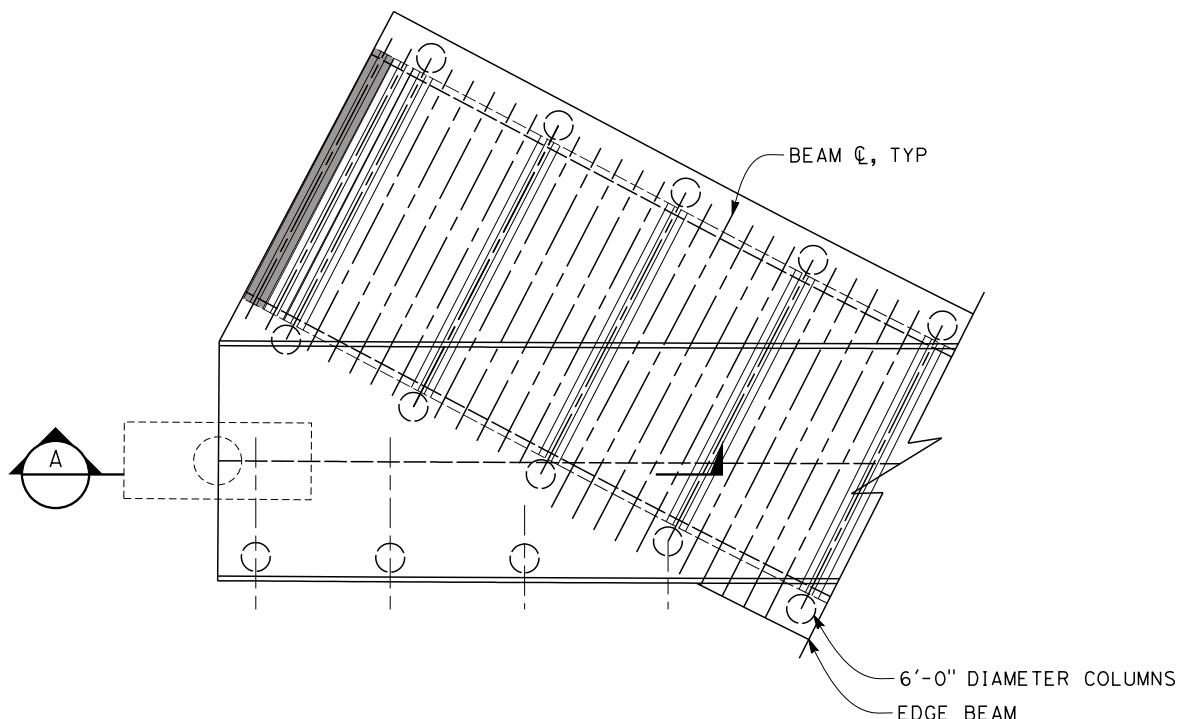


CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
PACKAGE 2-3
350'-0" STEEL TRUSS
DETAILS

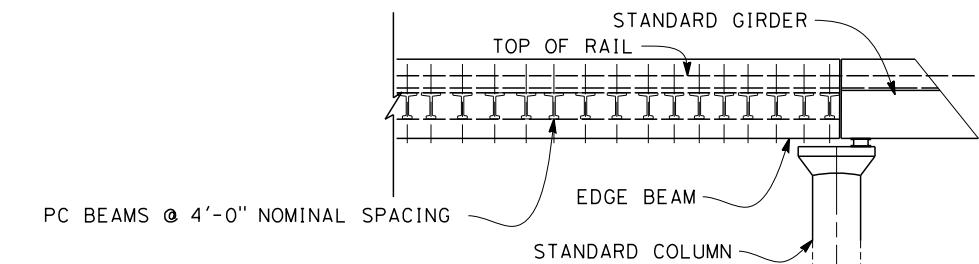
CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J5035
SCALE
AS SHOWN
SHEET NO.



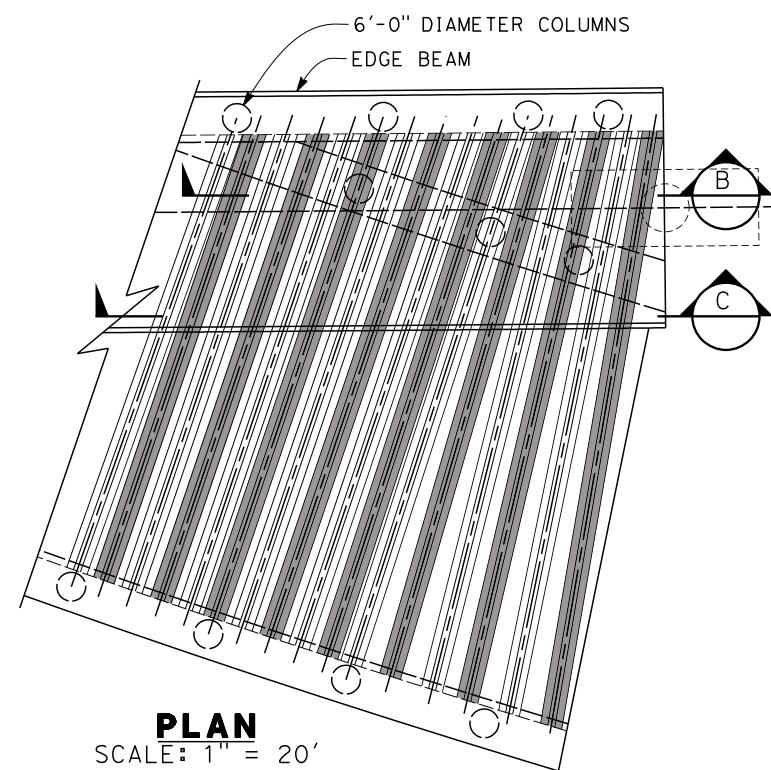
DESIGNED BY M. FISHER	PROPOSED PRELIMINARY DESIGN NOT FOR CONSTRUCTION	  	CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD PACKAGE 2-3 ELEVATED SLAB STRUCTURE SECTIONS AND LAYOUT GENERAL ARRANGEMENT						
DRAWN BY F. PALERMO									
CHECKED BY A. ARMSTRONG									
IN CHARGE R. COFFIN									
DATE 05/30/14									
REV	DATE	BY	CHK	APP	DESCRIPTION				



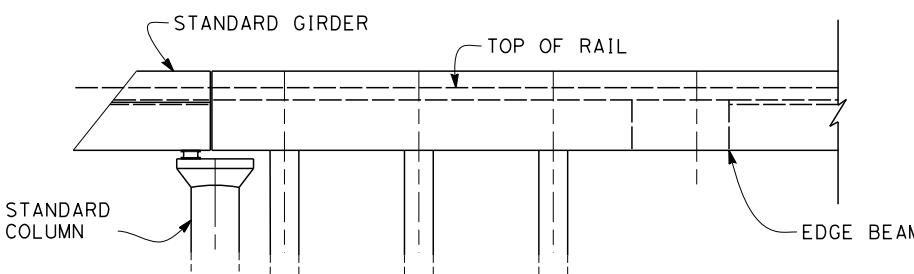
PLAN
SCALE: 1" = 20'



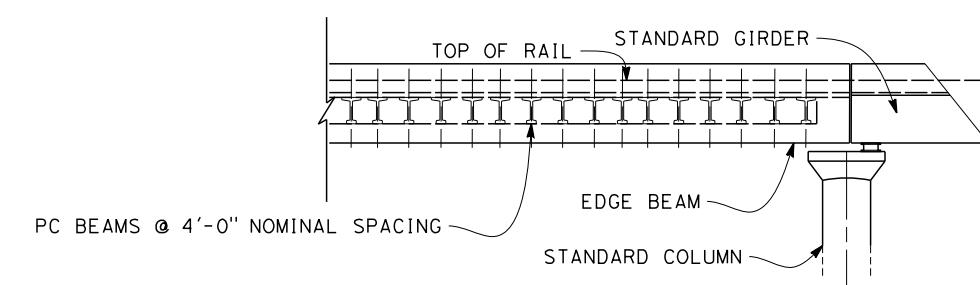
SECTION B
SCALE: 1" = 20'



PLAN
SCALE: 1" = 20'

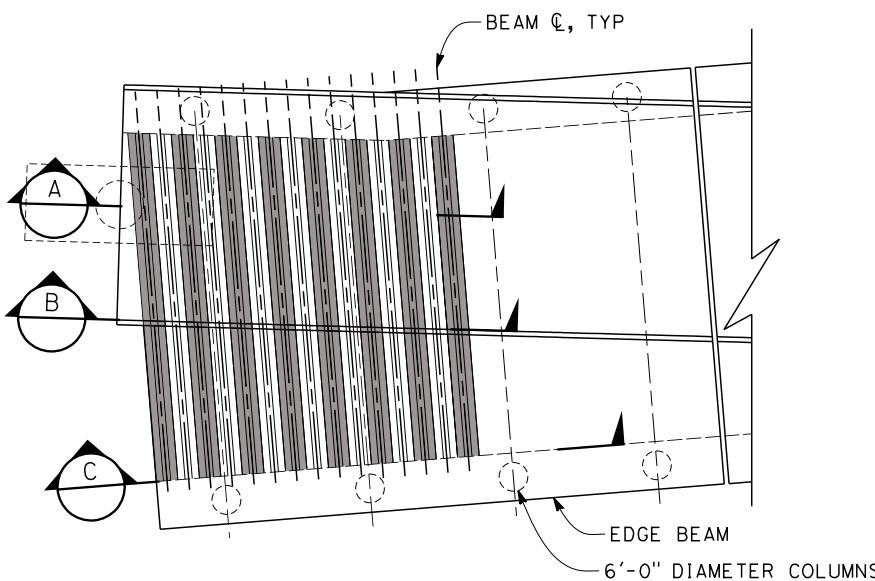


SECTION A
SCALE: 1" = 20'

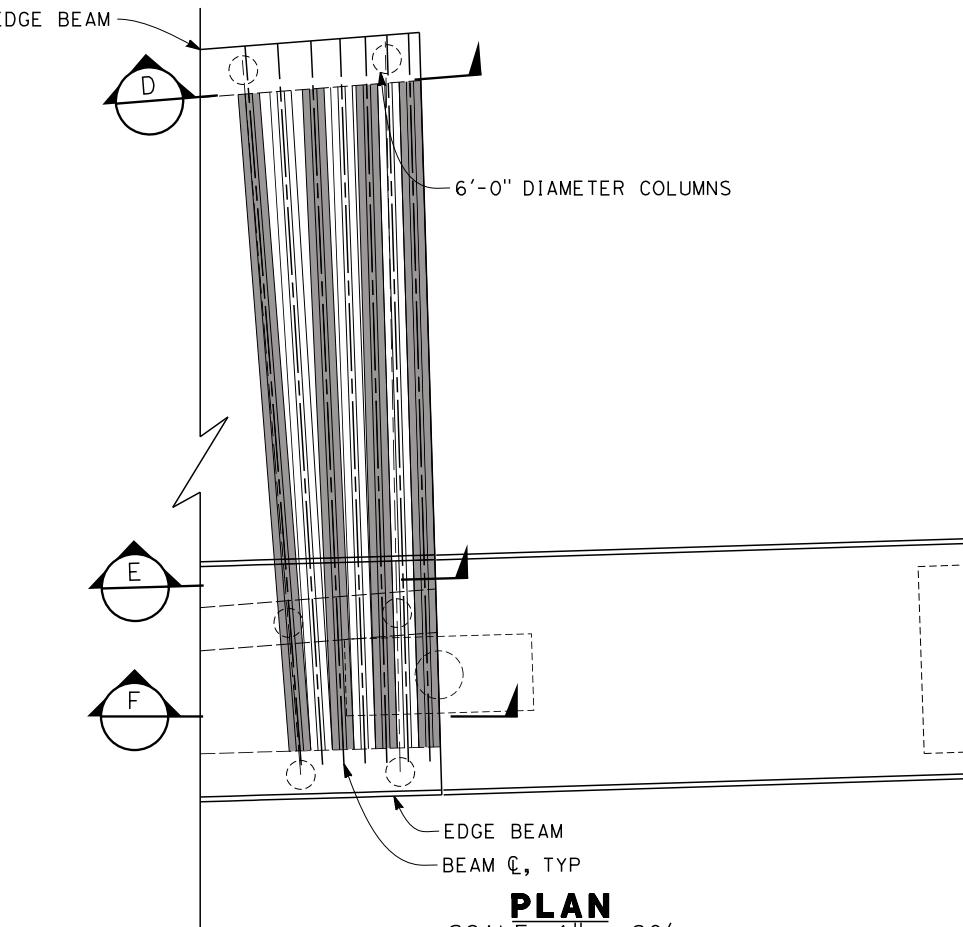


SECTION C
SCALE: 1" = 20'

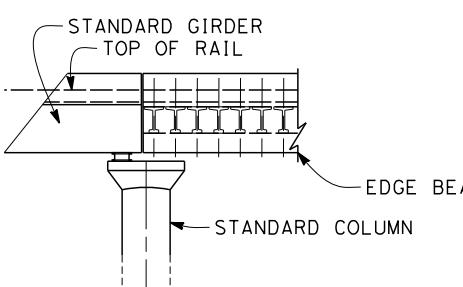
DESIGNED BY M. FISHER	PROPOSED PRELIMINARY DESIGN	URS HMM ARUP	CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CONTRACT NO. HSR 06-0003
DRAWN BY F. PALERMO	NOT FOR CONSTRUCTION			DRAWING NO. ST-J5054
CHECKED BY A. ARMSTRONG				SCALE 1" = 20'
IN CHARGE R. COFFIN				SHEET NO.
DATE 05/30/14	DESCRIPTION 05/30/14			



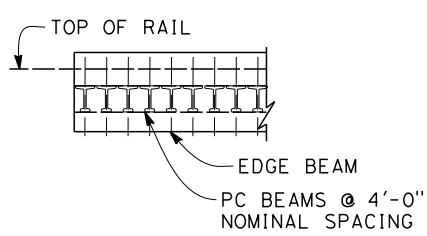
PLAN
SCALE: 1" = 20'



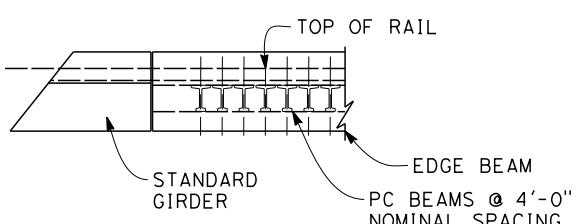
PLAN
SCALE: 1" = 20'



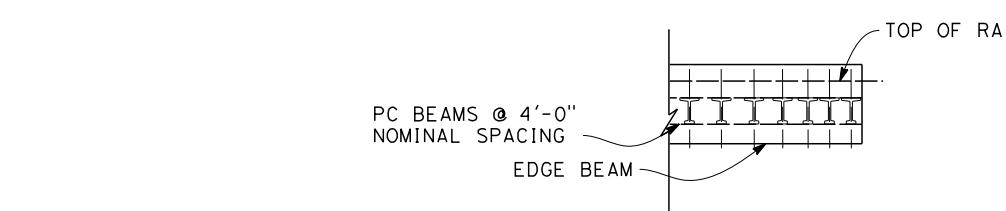
SECTION A
SCALE: 1" = 20'



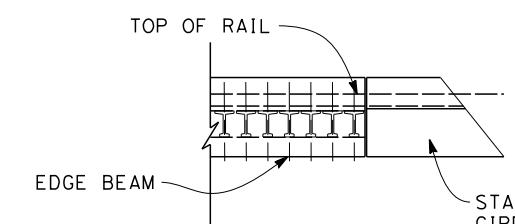
SECTION C
SCALE: 1" = 20'



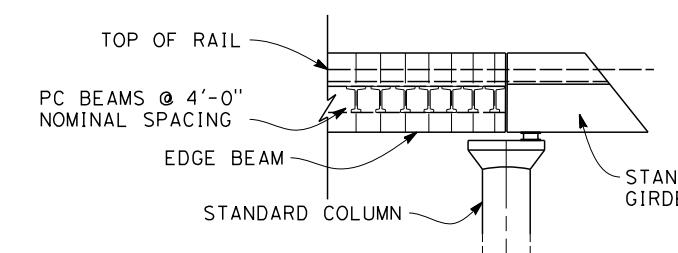
SECTION B
SCALE: 1" = 20'



SECTION D
SCALE: 1" = 20'



SECTION E
SCALE: 1" = 20'



SECTION F
SCALE: 1" = 20'

NOTE:
1. REFER TO DRAWING ST-J5051 FOR DOWEL LAYOUT AND DETAILS

\$FILE\$
\$PLTDRV\$
\$PNTBL\$
\$TIME\$
\$DATE\$
\$USER\$

REV	DATE	BY	CHK	APP	DESCRIPTION	DESIGNED BY M. FISHER	DRAWN BY F. PALERMO	CHECKED BY A. ARMSTRONG	IN CHARGE R. COFFIN	PROPOSED PRELIMINARY DESIGN	NOT FOR CONSTRUCTION
					05/30/14						



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
PACKAGE 2-3
ELEVATED SLAB STRUCTURE
TYPICAL SECTIONS AND LAYOUT
GENERAL ARRANGEMENT

CONTRACT NO.
HSR 06-0003
DRAWING NO.
ST-J5058
SCALE
1" = 20'
SHEET NO.